



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

400 Seventh Street, S.W.
Washington, D.C. 20590

Dear Crash Data Researchers/Users:

Thank you for choosing crash data from the National Highway Traffic Safety Administration (NHTSA) for your research or other use. The information contained in this motor vehicle crash report is collected, maintained and distributed in accordance with Public Law 89-564. In accordance with this Public Law, NHTSA is required not to release any case information until completion of quality control procedures. These procedures include a review of the case material to extract all names, licenses and registration numbers, non-coded interview material, non-research related researcher comments in the margins, non-factual data, and the production number portion of the vehicle identification number (VIN).

If you requested NHTSA to query its database files in order to identify a specific crash, then that query was made using non-personal descriptors you provided for use in our search. This motor vehicle crash may have been identified from a data search and matches the general, non-personal descriptors you provided, but we cannot confirm that this is the specific crash report you requested.

If you have any questions with regard to the above procedures, please contact the Field Operations Branch, Crash Investigation Division, National Center for Statistics and Analysis at 202-366-4820. Again, please be advised that we cannot confirm that this is the case that you have specifically requested nor can we certify the information to be correct.

*** *** ***



AUTO SAFETY HOTLINE
(800) 424-9393
Wash. D.C. Area 366-0123

UMTRI - 96 - 8
VERSION 05

UM-3720-98
1998 Saturn SL

In-depth Vehicle Occupant Report

The University
of Michigan
Transportation
Research Institute

UMIVOR-UMIVOR-UMIVOR



DISCLAIMERS

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The crash investigation process is an inexact science which requires that physical evidence such as skid marks, vehicular damage measurements, and occupant contact points are coupled with the investigator's expert knowledge and experience of vehicle dynamics and occupant kinematics in order to determine the pre-crash, crash, and post-crash movements of involved vehicles and occupants.

Because each crash is a unique sequence of events, generalized conclusions cannot be made concerning the crashworthiness performance of the involved vehicle(s) or their safety systems.

UM-3720-98

Case Veh. (A): 1998 Saturn
Type: SL2, 4-door sedan
Driver: 53-year-old female
CDC: 12-FREW-1

Vehicle (B): 1998 Volkswagen
Type: Jetta GL, 4-door sedan
Driver: 25-year-old male
CDC: 11-FYEW-1

Situation

(Slide 1, 2) At the time, the weather was clear, the roads were dry, and it was daylight. Case vehicle (A) was traveling west at a driver-estimated speed of 32 kph (20 mph) in the turn lane of a 5-lane asphalt road in an urban area. Vehicle (B) was stopped facing south on a private drive, and the driver was waiting to make a left turn onto the intersecting road. Traffic was heavy at this time of day and vehicle (X) and vehicle (Y), which were traveling in the westbound lanes, next to case vehicle (A), stopped to allow vehicle (B) to exit the private drive. As case vehicle (A) was approaching the private drive, the driver of vehicle (B) pulled across the westbound lanes and center turn lane to travel east on the 5-lane roadway. Case vehicle (A) was unable to avoid striking the front left of vehicle (B) with its front right.

(Slide 3, 4, 5) Damage to the front of vehicle (B) was minor with a maximum crush of 10 cm to the left-front bumper corner. The direct damage began at the left-front bumper corner and extended 66 cm across the front, resulting in 46 percent front-end overlap and 47 percent vehicle overlap. The front bumper was crushed, the grille was damaged, and the right headlight assembly was broken. The hood was deformed, but there was no damage to the hood latch or hood hinges. The left-front fender was deformed. There was no other damage to the left side and no change in the left wheelbase. On the right side, the front fender was deformed. There was no other damage to the right side and no change in the right wheelbase.

(Slide 6-18) Using the SMASH accident-reconstruction program and c-values measured for case vehicle (A) and vehicle (B), the following impact severities were calculated:

Vehicle	Variable	Calculated Velocity Change - kph (mph)		
		Total	Longitudinal	Latitudinal
Case Vehicle (A)	Delta V	14 (9)	-14 (-9)	-3 (-2)
	EBS	16 (10)	-16 (-10)	-3 (-2)
Vehicle (B)	Delta V	13 (8)	-11 (-7)	6 (4)
	EBS	11 (7)	-10 (-6)	6 (4)

Exterior Damage

(Slide 19) Damage to the front of case vehicle (A) was moderate with a maximum crush of 17 cm above the right-front bumper corner. The direct damage began at the right-front bumper corner and extended 51 cm across the front, resulting in 34 percent front-end overlap and 35 percent vehicle overlap. (Slide 20) The front bumper was crushed, the grille was damaged, and the both headlight assemblies were broken. The hood was crushed, the damaged hood latch was released, and both hood hinges were deformed but not separated. (Slide 21) The rear edge of the hood was also elevated, but it did not contact the windshield. (Slide 22) On the right side, the front fender was crushed, and the right-front wheel was damaged. There was no other damage to the right side and no change in the right wheelbase. (Slide 23) There was no damage to the left side of case vehicle (A) and no change in the left wheelbase.

Interior Damage

(Slide 24, 25) This vehicle is equipped with steering-wheel and passenger frontal-impact airbags which deployed during the frontal impact. (Slide 26, 27) There was no damage to the steering wheel and no rotation of the steering column. (Slide 28) There was an 11-cm scuff mark on the airbag cover, which may have been from driver contact. (Slide 29, 30) The rear-view mirror was broken, and it contacted and cracked the right-center

portion of the windshield. (Slide 31, 32, 33) There was no damage to the upper, mid, or lower portions of the instrument panel, but there was a 6-cm scuff mark on the lower portion of the panel to the right of the steering column, and a 3-cm scuff mark on the panel to the left of the steering column from driver contact. (Slide 34, 35) There was no damage to the center dash area, or glove compartment. There was no other interior damage and no intrusions were noted.

Occupant Kinematics and Injuries

(Slide 36, 37) The 53-year-old female driver was wearing the 3-point belt. She reportedly had the seat in the most forward track position, and had her hands placed at the 10:00 and 2:00 position on the steering wheel. The shoulder-belt anchor point was adjusted to the "up" position on the B-pillar. During the frontal impact, she moved forward into the 3-point belt and deploying airbag. (Slide 38, 39) As the airbag deployed, it contacted her face, resulting in erythema to her nose. She also sustained erythema to her right anterior forearm from the deploying airbag, and she sustained a contusion to her left anterior forearm, from the airbag cover or the airbag. She sustained a contusion to her right upper thigh, probably from contact with the steering-wheel rim. (Slide 40) Her left leg contacted the lower portion of the instrument panel, as indicated by scuff marks on the panel, resulting in a contusion to her left thigh above the knee. (Slide 41) In addition, she sustained a contusion to her right knee from contact with the lower instrument panel, as evidenced by scuff marks on the panel.

(Slide 42) The attached table summarizes the injury information for the restrained occupant.

Occupant: Driver
 Restraints: 3-point belt worn, airbag deployed

Age: 53 years
 Stature: 160 cm (5 ft 3 in)

Sex: Female
 Mass: 64 kg (140 lb)

Injury Description	A.I.S.	Injury Source		
		Definite	Probable	Possible
Erythema, nose	1	Airbag		
Erythema, right anterior forearm	1	Airbag		
Contusion, left anterior forearm	1		Airbag cover, airbag	
Contusion, right upper thigh	1		Steering wheel	
Contusion, left thigh above the knee	1	Lower instrument panel		
Contusion, right knee	1	Lower instrument panel		
<u>Maximum A.I.S. Level</u>	<u>1</u>			
<u>Injury Severity Score</u>	<u>1</u>			

TEAM CODE

30

ACCIDENT ID

03720

VEHICLE NUMBER

1

MODULE

A D

FORMAT

0 1

FORM VERSION

0 5

NO. OF CASE VEHICLES IN ACCIDENT

1

NUMBER OF SLIDES

42

TEAM REPORT NUMBER

UM - 3720 - 98

SPECIAL STUDY

(00) None

(01) Offset Frontal

(98) Not Applicable

99

DATE OF FIELD INVESTIGATION:

[REDACTED] 98

INVESTIGATOR:

[REDACTED]

LOCATION WHERE VEHICLE WAS EVALUATED:

[REDACTED], MICHIGAN

CIRCLE PHOTO RECORDS MADE:

SLIDES

NEGATIVES

POLAROID

REPORT PREPARED BY:

[REDACTED]

GENERAL INFORMATION GI-1

BEST AVAILABLE

Duplicate columns 1-8
from the previous card.

Module G 1 Format 0 1
9 10 11 12

GENERAL INFORMATION GI-1

TIME

DATE OF COLLISION / 98
m m d d y y

HOUR OF COLLISION 1635
(24 HOUR CLOCK) 19 22

LOCATION

STATE: MICHIGAN

STATE FIPS CODE 26
23 24

AREA

(1) URBAN
(2) RURAL
(9) UNKNOWN

1
25

ENVIRONMENTAL CONDITIONS

LIMITED-ACCESS HIGHWAY

(0) NO
(1) YES
(9) UNKNOWN

0
26

ROAD, TOTAL TRAFFIC LANES
(FOR CASE VEHICLE)

(1) 1-LANE
(2) 2-LANES
(3) 3-LANES
(4) 4 OR MORE LANES
(5) DIVIDED, 4 OR MORE LANES
(6) PARKING LOT/DRIVEWAY
(7) OTHER: _____
(9) UNKNOWN

5
27

INTERSECTING RD, TOTAL LANES

CHOOSE FROM ABOVE LIST, OR

(8) NOT APPLICABLE

6
28

TYPE OF ROAD SURFACE

(1) ASPHALT
(2) CONCRETE
(3) GRAVEL
(4) MORE THAN ONE (CIRCLE EACH)
(7) OTHER: _____
(9) UNKNOWN

1
29

ROAD DEFECTS

(0) NO
(1) YES
(9) UNKNOWN

0
30

ENVIRONMENTAL CONDITIONS

CONSTRUCTION ZONE

(0) NO
(1) YES
(9) UNKNOWN

0
31

ROAD ALIGNMENT
VERTICAL PLANE

(1) LEVEL
(2) CREST OF HILL
(3) SLOPE (2%)
(4) BOTTOM OF HILL
(9) UNKNOWN

1
32

ROAD ALIGNMENT
HORIZONTAL PLANE

(1) STRAIGHT
(2) CURVE
(3) T - SHAPED
(4) Y - SHAPED
(9) OTHER: _____
(9) UNKNOWN

1
33

SURFACE COVERING

(10) DRY

1 0
34 35

(21) WATER - DAMP
(22) WATER - WET
(23) WATER - PUDDLED
(29) WATER - AMOUNT UNKNOWN

(31) SNOW - LOOSE
(32) SNOW - PACKED
(39) SNOW - CONDITION UNKNOWN

(41) ICE
(51) SLUSH
(61) SPILLED GRAVEL
(71) OTHER: _____
(99) UNKNOWN

VISIBILITY LIMITATION
(FOR CASE VEHICLE)

(0) NONE
(1) CLOUDY/DARK
(2) FOG
(3) SMOKE
(4) WINDSHIELD CONDITION
(5) GLARE
(6) RAIN
(7) OTHER: _____
(8) ICE/SNOW
(9) UNKNOWN

0
36

VISIBILITY OBSTRUCTION
(FOR CASE VEHICLE)

(0) NONE
(1) BUILDING
(2) SIGN
(3) VEGETATION (E.G. BUSHES, SHRUBS)
(4) TREE
(5) HILL OR CURVE IN ROAD
(6) VEHICLE IN TRANSPORT
(7) OTHER: _____
(8) PARKED VEHICLE
(9) UNKNOWN

0
37

GENERAL INFORMATION GI-3

CRASH DETAILS

CASE VEHICLE AND OBJECT

- (0) NO
(1) YES
(9) UNKNOWN

0
45

CASE VEHICLE ROLLOVER

- (0) NO ROLLOVER
(1) YES, FIRST EVENT
(2) YES, SUBSEQUENT EVENT
(3) YES, SEQUENCE UNKNOWN
(9) UNKNOWN

0
46

CASE VEHICLE RAN OFF ROADWAY
(BEFORE FIRST IMPACT)

- (0) NO
(1) YES
(9) UNKNOWN

0
47

MOVING CASE VEHICLE AND
CONTACTED MOVING VEHICLE

- (0) NO
(1) YES
(9) UNKNOWN

1
48

CASE VEHICLE AND
CONTACTED STOPPED VEHICLE

- (0) NO
(1) YES
(9) UNKNOWN

0
49

STOPPED CASE VEHICLE AND
CONTACTED VEHICLE

- (0) NO
(1) YES
(9) UNKNOWN

0
50

TOTAL NUMBER
OF VEHICLES CONTACTED
BY CASE VEHICLE IN CRASH

- (8) 8 OR MORE
(9) UNKNOWN

1
51

ANY FIRE IN THIS CRASH
(NOT JUST CASE VEHICLE)

- (0) NO
(1) YES
(9) UNKNOWN

0
52

HIGHEST POLICE INJURY
SEVERITY CODE IN CRASH
(NOT JUST CASE VEHICLE)

- (0) O - NO INJURY
(1) C - POSSIBLE INJURY
(2) B - NON-INCAPACITATING INJURY
(3) A - INCAPACITATING INJURY
(4) K - FATAL
(5) INJURED, SEVERITY UNKNOWN
(6) DIED PRIOR TO ACCIDENT
(7) NON-FATAL INJURY
SEVERITY UNKNOWN
(9) UNKNOWN

2
53

DRIVER IMPAIRMENT

DRIVER ALCOHOL INVOLVEMENT
(CASE VEHICLE)

- (0) NONE
(1) YES
(9) UNKNOWN/NOT REPORTED/
NO DRIVER

0
54

DRIVER ALCOHOL BAC
(CASE VEHICLE)

- (80) NO TEST
(90) CHEMICAL TESTS, NO RESULTS
(95) AUTOPSY, NO RESULTS
(99) UNKNOWN

80
55 56

WAS THERE MENTION OF DRIVER
IMPAIRMENT FOR CASE VEHICLE?

- (0) NO
(1) YES
(9) UNKNOWN

0
57

LIST IMPAIRMENTS MENTIONED:

Post - CRASH DETAIL

MANNER CASE VEHICLE
LEFT SCENE

- (1) DRIVEN
(2) TOWED DUE TO DAMAGE
(3) TOWED, NOT DUE TO DAMAGE
(4) TOWED, REASON UNKNOWN
(9) UNKNOWN

2
58

ACCIDENT SCHEMATIC

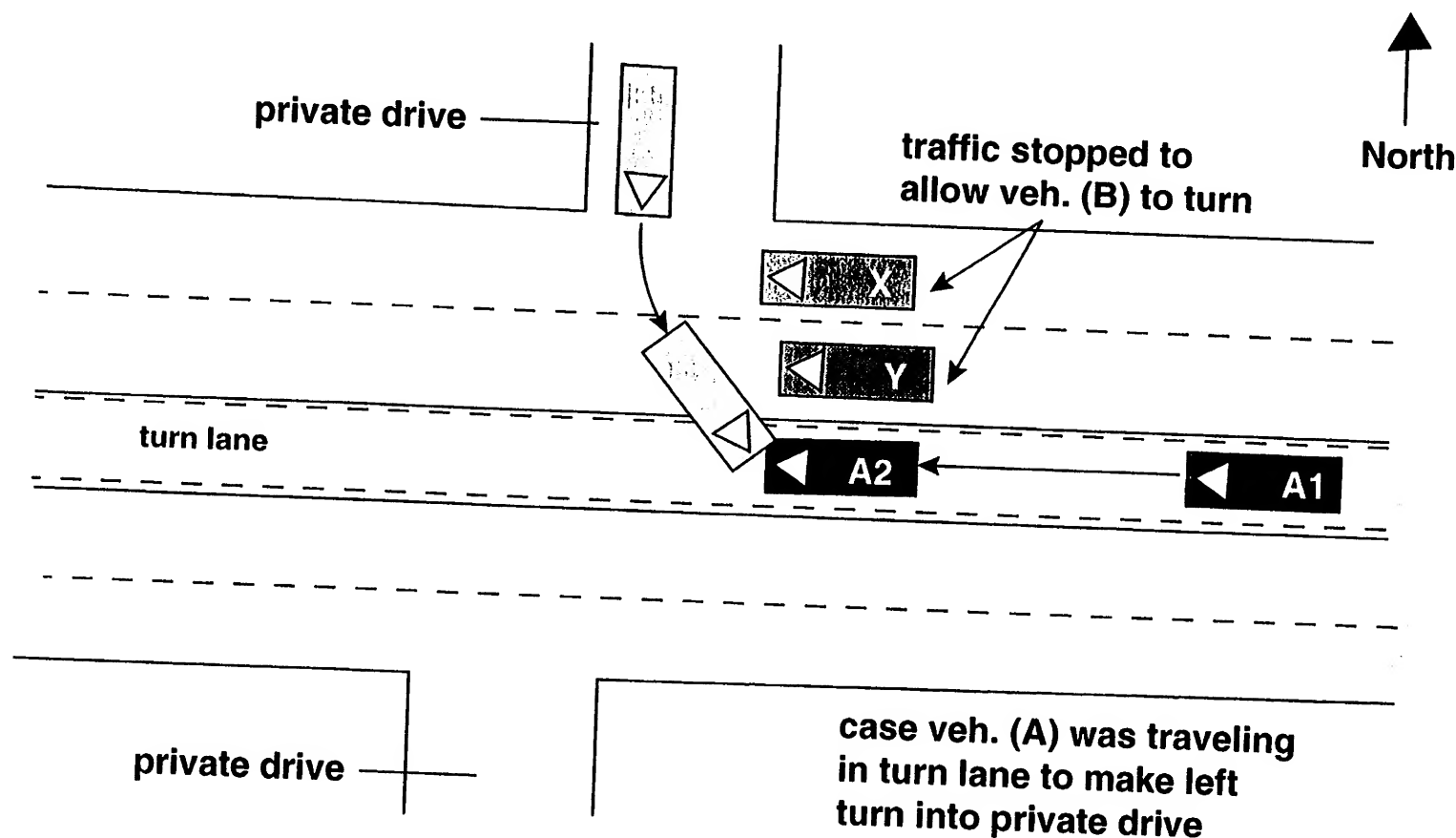
ACCIDENT DESCRIPTION: CASE VEHICLE (A) WAS TRAVELING WEST IN THE TURN LANE AT A DRIVER-ESTIMATED SPEED OF 32 KPH (20 MPH). VEHICLES (X) AND (Y)

CASE VEHICLE (A): 1998 SATURN SL2
 OTHER VEHICLE (B): 1998 VOLKSWAGEN JETTA
 THIRD VEHICLE (C): _____

WERE STOPPED IN THE WESTBOUND LANES TO ALLOW VEHICLE (B) TO EXIT A PRIVATE DRIVE, IN ORDER TO TRAVEL EAST. AS VEHICLE (B) PROCEEDED ACROSS THE LANES, IT WAS STRUCK BY CASE VEHICLE (A) IN THE TURN LANE.



NORTH



Duplicate columns 1-8
from the previous card.Module 0 V Format 0 1
9 10 11 12

OTHER VEHICLE OV-1

MAKE: VOLKSWAGEN
MODEL: JETTA GL 4-DOOR SEDANCARGO: NONE

VIN

13

29

MANUFAC/BODY CODE

94426
30 34

MAKE/MODEL CODE

0832
38

MODEL YEAR

1998

VEHICLE MASS (kg)

001170
41 46IF SEPARATE REPORT WAS MADE,
GIVE VEHICLE NUMBER0NUMBER OF OCCUPANTS
(ENTER 9'S IF UNKNOWN)02
49

TRAVELING SPEED (km/h)

995
52

- (000) PARKED OR STOPPED
 (995) JUST STARTING UP
 (996) BACKING UP
 (997) SPEED NOT EXCESSIVE (BUT UNKNOWN)
 (998) SPEED EXCESSIVE (BUT UNKNOWN)
 (999) UNKNOWN

HIGHEST POLICE INJURY SEVERITY
CODE FOR THIS VEHICLE

- (0) O - NO INJURY
 (1) C - POSSIBLE INJURY
 (2) B - NON-INCAPACITATING INJURY
 (3) A - INCAPACITATING INJURY
 (4) K - FATAL
 (5) INJURED, SEVERITY UNKNOWN
 (6) DIED PRIOR TO ACCIDENT
 (7) NON-FATAL INJURY
 SEVERITY UNKNOWN
 (8) UNOCCUPIED VEHICLE
 (NOT APPLICABLE)
 (9) UNKNOWN

53

VEHICLE TYPE

PASSENGER VEHICLE

- (02) LARGE
 (03) LIMOUSINE
 (17) PICKUP CAR
 (20) UNKNOWN PASSENGER VEHICLE BODY
 (24) SUB-MINI
 (25) MINI
 (26) SUB-COMPACT
 (27) COMPACT
 (28) INTERMEDIATE
 (29) FULL

26
54 55

MULTIPURPOSE PASSENGER VEHICLE

- (14) SMALL UTILITY (WHEELBASE LESS THAN 107",
E.G. JEEP, BRONCO)
 (15) LARGE UTILITY (WHEELBASE MORE THAN 107",
E.G. PANEL TRUCK, SUBURBAN)
 (16) PICKUP TRUCK WITH CANOPY/SHELL COVER
 (17) PICKUP CAR WITH CANOPY/SHELL COVER
 (21) MOTOR HOME
 (22) PICKUP TRUCK WITH SLIDE-IN CAMPER
 (23) PICKUP CAR WITH SLIDE-IN CAMPER
 (31) CHASSIS-MOUNTED CAMPER

TRUCK

- (11) VAN
 (12) PICKUP TRUCK
 (13) UNKNOWN LIGHT TRUCK
 (15) LARGE UTILITY (E.G. PANEL TRUCK, SUBURBAN)
 (16) PICKUP TRUCK WITH CANOPY/SHELL COVER
 (22) PICKUP TRUCK WITH SLIDE-IN CAMPER
 (30) UNKNOWN TRUCK TYPE
 (31) CHASSIS-MOUNTED CAMPER
 (33) DELIVERY VAN (WALK-IN)
 (34) STRAIGHT TRUCK
 (35) TRUCK-TRACTOR (BOBTAIL)
 (36) CHASSIS-CAB
 (37) UNKNOWN HEAVY TRUCK
 (38) TRACTOR & SEMI-TRAILER (SEMI)
 (39) TRUCK (OR SEMI) & FULL TRAILER(S)

BUS

- (40) UNKNOWN BUS TYPE
 (41) SCHOOL BUS
 (42) INTERCITY BUS (BETWEEN CITIES)
 (43) TRANSIT BUS (INTRACITY)
 (44) STREETCAR (ON TRACKS)
 (68) TRAIN (CARS)
 (69) LOCOMOTIVE (ENGINE, SWITCHER)
 (99) UNKNOWN

WHEELBASE (cm)
(999) UNKNOWN248
56 57 58

Duplicate columns 1-8
from the previous card.

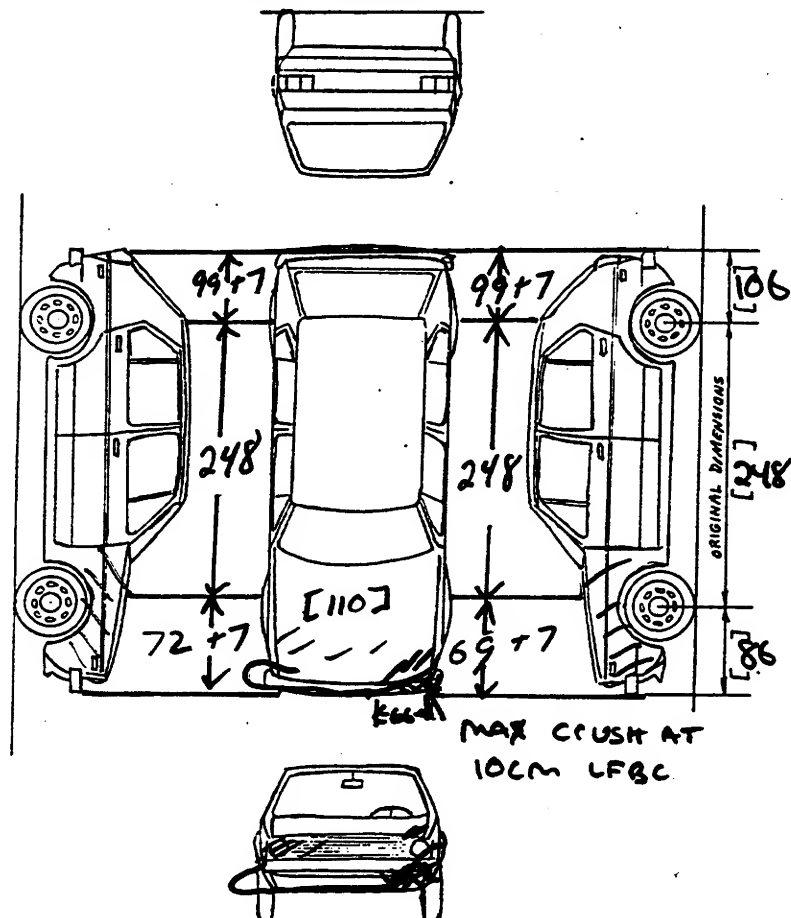
Module 0 V Format 0 2
9 10 11 12

OTHER VEHICLE OV-2

ORIGINAL SPECIFICATIONS

Wheelbase	<u>248</u> cm	Front Overhang	<u>086</u> cm
Curb Weight	<u>1170</u> kg	Rear Overhang	<u>106</u> cm
Average Track Width	<u>146</u> cm	Undeformed End Width (UEW)	<u>143</u> cm
Overall Length	<u>440</u> cm	Engine Displacement	<u>2.0</u> L
Overall Width (OAW)	<u>170</u> cm	Engine: # of Cylinders	<u>04</u>

VEHICLE DAMAGE



FRONTAL CRASH OVERLAP

Round up for .5. 98 = 98% or more
Enter % overlap or "99" for missing or N/A.

Direct Damage Length (DDL) 066 cm

Front-End Overlap (Percent) = $\frac{DDL}{UEW}$ $\frac{66}{143}$ 46 %

Vehicle Overlap (Percent) = $\frac{DDL + 1/2 (OAW - UEW)}{OAW}$ $\frac{66 + 1/2 (170 - 143)}{170}$ 47 %

Duplicate columns 1-8
from the previous card.Module V D Format 0 1
9 10 11 12

VEHICLE DESCRIPTION VD-1

MAKE: SATURN
MODEL: SL2 4-DOOR SEDANCARGO: NONE

VIN

13

29

MANUFAC/BODY CODE

11827
30 34

MAKE/MODEL CODE

3701
38

MODEL YEAR

1998

VEHICLE MASS (kg)

001085
41 46

ODOMETER (km)

(ENTER 9'S IF UNKNOWN)

(ENTER 8'S IF ELECTRONIC)

007356
47 52

NUMBER OF OCCUPANTS

(ENTER 9'S IF UNKNOWN)

01
54

TRAVELING SPEED (km/h)

032
57

(000) PARKED OR STOPPED

(995) JUST STARTING UP

(996) BACKING UP

(997) SPEED NOT EXCESSIVE (BUT UNKNOWN)

(998) SPEED EXCESSIVE (BUT UNKNOWN)

(999) UNKNOWN

20

STOLEN VEHICLE

- (0) NO
(1) YES
(8) NOT COLLECTED
(9) UNKNOWN

8
60

BODY STRUCTURE

- (1) BODY & FRAME
(2) UNITIZED
(3) INTEGRAL-STUB FRAME
(4) BODY & PLATFORM FRAME
(E.G. VW BUG)
(5) PARTIALLY UNITIZED
(7) OTHER: _____
(9) UNKNOWN

2
61

TRANSMISSION

- (0) NONE
(1) AUTOMATIC
(2) MANUAL
(9) UNKNOWN

1
62

VEHICLE TYPE

PASSENGER VEHICLE

- (11) 2-DOOR HARDTOP (NO UPPER B-PILLAR)
(12) 2-DOOR SEDAN OR COUPE
(ANY UPPER B-PILLAR)
(13) 4-DOOR HARDTOP
(14) 4-DOOR SEDAN
(15) STATION WAGON
(16) CONVERTIBLE
(18) OTHER PASS. VEH.: _____
(19) PASSENGER VEHICLE, TYPE UNKNOWN

14
58 59

MULTIPURPOSE PASSENGER VEHICLE

- (21) SMALL UTILITY (E.G. JEEP, SCOUT, BRONCO)
(22) LARGE UTILITY (E.G. PANEL TRUCK, SUBURBAN)
(23) VAN, SIZE UNKNOWN
(24) VAN, SMALL (MINI)
(25) VAN, LARGE
(29) MPV, TYPE UNKNOWN
(30) MOTOR HOME

TRUCK

- (31) PICKUP TRUCK, UNKNOWN
(32) PICKUP TRUCK, SMALL (DOWNSIZED)
(33) PICKUP TRUCK, LARGE

(99) UNKNOWN

LOCATION OF TRANSMISSION
SELECTOR LEVER

- (1) FLOOR
(2) CONSOLE
(3) COLUMN
(7) OTHER: _____
(9) UNKNOWN

2
63

STEERING

- (1) POWER
(2) MANUAL
(9) UNKNOWN

1
64

BRAKES

- (1) POWER
(2) MANUAL
(9) UNKNOWN

1
65

VEHICLE DESCRIPTION VD-2

TYPE OF BRAKES

- (1) DRUM, ALL WHEELS
 (2) DISC, FRONT WHEELS
 (3) DISC, ALL WHEELS
 (9) UNKNOWN

2
66

WHEELBASE (cm)
 (999) Unknown

260
74 75 76

BRAKE ANTI-LOCK DEVICE

- (0) NONE INSTALLED
 (1) TWO-WHEEL
 (2) FOUR-WHEEL
 (7) EQUIPPED, UNKNOWN WHEELS
 (9) UNKNOWN

2
67

PLASTIC ANTI-LACERATIVE
 INNER LAYER GLASS EQUIPPED

- (0) NONE
 (1) WINDSHIELD
 (2) WINDSHIELD AND SIDE
 (7) OTHER
 (9) UNKNOWN

0
77

AIR CONDITIONING IN VEHICLE

- (0) NO
 (1) YES
 (8) NOT COLLECTED
 (9) UNKNOWN

8
68

TYPE OF DRIVE

- (1) REAR WHEEL
 (2) FRONT WHEEL
 (3) FOUR WHEEL
 (4) ALL WHEEL DRIVE
 (9) UNKNOWN

2
69

FIELD INVESTIGATOR INSTRUCTIONS:

1. INDICATE CRUSHED AREAS BY OUT-LINING NEW PERIMETER OF VEHICLE AND SHADING THE DAMAGED AREAS ON THE LARGE SKETCH ON PAGE VD-3. USE AS MANY SKETCHES AS NECESSARY TO COMPLETELY DESCRIBE THE DAMAGE.
2. ENTER THE DIMENSIONS ON THE SKETCH(ES) MEASURED TO THE POINT OF MAXIMUM PENETRATION BY THE OBJECT(S) CONTACTED. USE THE EXAMPLES BELOW AS A GUIDE.
3. ENTER THE THREE DIMENSIONS TO THE CENTER OF THE WHEELS (WHEELBASE, FRONT AND REAR OVERHANGS) ON BOTH SIDES OF THE CAR.
4. ADD OTHER DIMENSIONS AS NECESSARY TO COMPLETELY DESCRIBE THE DAMAGE.

DUAL REAR WHEELS

- (0) NO
 (1) YES
 (9) UNKNOWN

0
70

ORIGINAL TYPE OF RESTRAINT SYSTEM

- (1) ACTIVE BELT
 (2) PASSIVE BELT
 (3) AIRBAG
 (4) KNEE BOLSTERS
 (7) OTHER: _____
 (8) NOT APPLICABLE (NOT EQUIPPED)
 (9) UNKNOWN

DUAL

3
71

EXAMPLES:

EQUIPPED WITH ROLL BAR

- (0) NO
 (1) YES
 (9) UNKNOWN

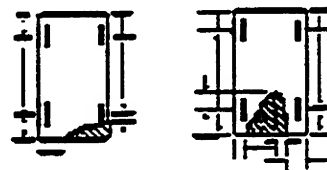
0
72

TYPE OF ROOF

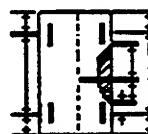
- (0) NONE
 (1) SOLID
 (2) T-TOP CLOSED
 (3) T-TOP OPEN
 (4) SUN ROOF CLOSED
 (5) SUN ROOF OPEN
 (6) CONVERTIBLE CLOSED
 (7) CONVERTIBLE OPEN
 (8) OTHER: _____
 (9) UNKNOWN

1
73

FRONT OR REAR



SIDE



ROOF (REFERENCE TO
 TOP OF DOOR SILL
 OR WINDOW SILL)



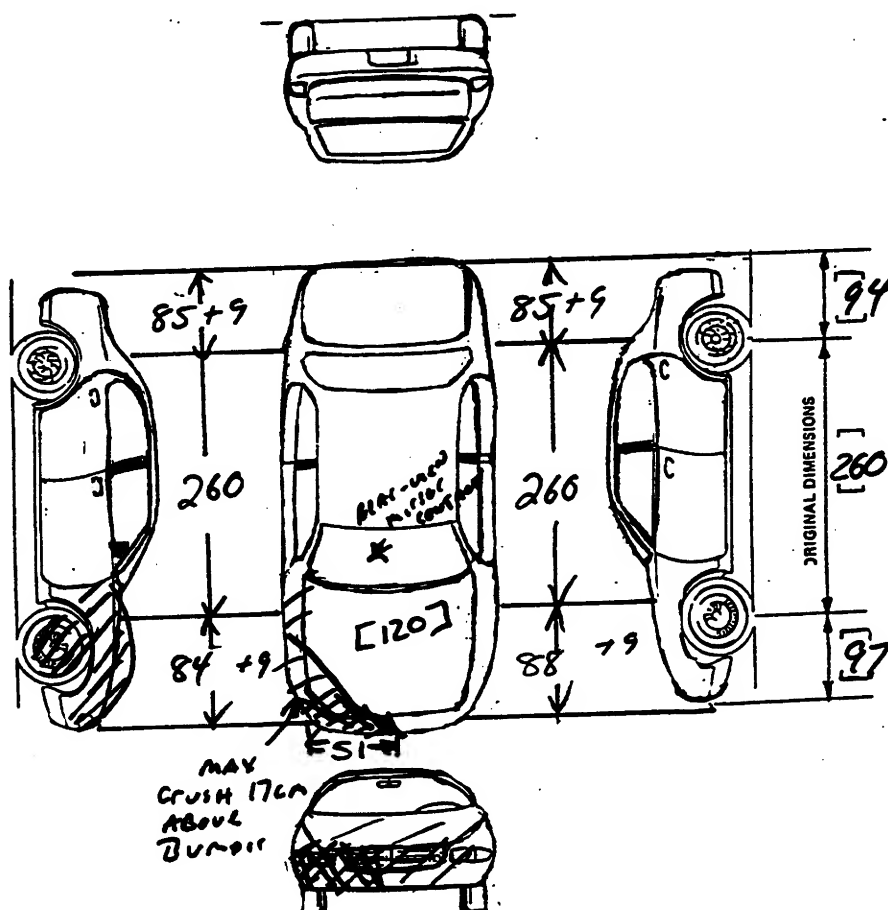
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from the previous card.Module V D Format 0 2
9 10 11 12

VEHICLE DESCRIPTION VD-3

ORIGINAL SPECIFICATIONS

Wheelbase	<u>260</u> cm	Front Overhang	<u>09</u> <u>7</u> cm
Curb Weight	<u>1085</u> kg	Rear Overhang	<u>09</u> <u>4</u> cm
Average Track Width	<u>14</u> <u>3</u> cm	Undeformed End Width (UEW)	<u>15</u> <u>2</u> cm
Overall Length	<u>44</u> <u>9</u> cm	Engine Displacement	<u>1.9</u> L
Overall Width (OAW)	<u>17</u> <u>0</u> cm	Engine: # of Cylinders	<u>04</u>

VEHICLE DAMAGE



FRONTAL CRASH OVERLAP

Round up for .5. 98 = 98% or more
Enter % overlap or "99" for missing or N/A.

Direct Damage Length (DDL) 051 cm

Front-End Overlap (Percent) = $\frac{DDL}{UEW}$ 51
152 34%

Vehicle Overlap (Percent) = $\frac{DDL + 1/2 (OAW - UEW)}{OAW}$ 51 + 1/2 (170 - 152)
170 35%

Duplicate columns 1-8
from the previous card.Module D A Format 0 2
9 10 11 12

DAMAGE DA-1

PRIMARY	CASE VEHICLE PRIMARY CDC	CONTACTED VEHICLE ASSOCIATED CDC
EVENT NUMBER	<u>1</u> 13	VEH. B
IMPACT SPEED (km/h)	<u>999</u> 14 15 16	<u>999</u> 35 36 37
ESTIMATED BY	<u>1</u> 17	<u>1</u> 38
CRUSH (cm)	+10 <u>017</u> 18 19 20	-30 <u>010</u> 39 40 41
CDC #1	<u>12.FREW.1</u> 21 27	<u>11.FYEW.1</u> 42 48
CDC #2	<u>98.0000.0</u> 28 34	<u>98.0000.0</u> 49 55

Duplicate columns 1-8
from the previous card.Module D A Format 0 3
9 10 11 12

SECONDARY	CASE VEHICLE SECONDARY CDC	CONTACTED VEHICLE ASSOCIATED CDC
EVENT NUMBER	<u> </u> 13	
IMPACT SPEED (km/h)	<u> </u> <u> </u> <u> </u> 14 15 16	<u> </u> <u> </u> <u> </u> 35 36 37
ESTIMATED BY	<u> </u> 17	<u> </u> 38
CRUSH (cm)	<u> </u> <u> </u> <u> </u> 18 19 20	<u> </u> <u> </u> <u> </u> 39 40 41
CDC #1	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> 21 27	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> 42 48
CDC #2	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> 28 34	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> 49 55

CODES

EVENT NUMBER

(8) NOT APPLICABLE
(9) UNKNOWN

IMPACT SPEED

(998) NOT APPLICABLE
(999) UNKNOWN

IMPACT SPEED ESTIMATOR

(1) INVESTIGATOR
 (2) DRIVER
 (3) POLICE
 (4) "CRASH" PROGRAM
 (5) OTHER COMPUTER PROGRAM
 SPECIFY: _____
 (7) OTHER: _____
 (8) NOT APPLICABLE
 (NO VEHICLE/NO IMPACT)

CRUSH

(998) NOT APPLICABLE
(NO VEHICLE/DAMAGE)
(999) UNKNOWN

CDC

(9800000) NOT APPLICABLE
(9900000) UNKNOWN

Duplicate columns 1-8
from the previous card.Module D A Format 0 1
9 10 11 12

DAMAGE DA-2

MAXIMUM SHEET METAL CRUSH

(cm) (999) UNKNOWN

FRONT 017 13 15 *ABOVE Bumper* RIGHT SIDE 000 16 18

REAR 000 19 21 LEFT SIDE 000 22 24

ROOF 000 25 27 OTHER 000 28 30

CHRONOLOGICAL SEQUENCE
OF DAMAGE/INJURY PRODUCING CRASH EVENTS
FOR CASE VEHICLE

NOTE: IF CHRONOLOGICAL ORDER
IS UNKNOWN, EVENT
ORDER IS OPTIONAL

DO YOU KNOW THIS TABLE
TO BE IN CHRONOLOGICAL ORDER? 1

31

(0) NO
(1) YES

EVENT NUMBER	IMPACT LOCATION (1) ON ROADWAY (2) SHOULDER/MEDIAN/GORE (3) ON ROADSIDE (4) OUTSIDE ROADSIDE RIGHT-OF-WAY (5) OTHER (6) OFF ROADWAY, LOC. UNK. (9) UNKNOWN	IMPACT CONFIGURATION FOR CODES, SEE TABLE ON PAGE DA-3.	OBJECT/VEHICLE CONTACTED FOR CODES, SEE TABLE ON PAGE DA-4.
# 1	<u>1</u> 32	<u>11</u> 34	<u>26</u> 36
#2	<u> </u> 37	<u> </u> 39	<u> </u> 41
#3	<u> </u> 42	<u> </u> 44	<u> </u> 46
#4	<u> </u> 47	<u> </u> 49	<u> </u> 51
#5	<u> </u> 52	<u> </u> 54	<u> </u> 56
#6	<u> </u> 57	<u> </u> 59	<u> </u> 61
#7	<u> </u> 62	<u> </u> 64	<u> </u> 66

CODES FOR
IMPACT CONFIGURATIONFRONT OF CASE VEHICLE

- (11) AND FRONT OF CONTACTED VEHICLE
- (13) AND SIDE OF CONTACTED VEHICLE
- (14) AND REAR OF CONTACTED VEHICLE
- (16) ENDSWIPED BY CONTACTED VEHICLE
- (17) AND OBJECT
- (19) AND UNKNOWN OTHER VEHICLE CONFIGURATION

LEFT SIDE OF CASE VEHICLE

- (21) AND FRONT OF CONTACTED VEHICLE (TYPE T)
- (22) AND FRONT OF CONTACTED VEHICLE (TYPE L)
- (23) AND SIDE OF CONTACTED VEHICLE (NOT SIDESWIPE)
- (24) AND REAR OF CONTACTED VEHICLE (TYPE T)
- (25) AND REAR OF CONTACTED VEHICLE (TYPE L)
- (26) SIDESWIPED BY CONTACTED VEHICLE
- (27) AND OBJECT
- (29) AND UNKNOWN OTHER VEHICLE CONFIGURATION

REAR OF CASE VEHICLE

- (31) AND FRONT OF CONTACTED VEHICLE
- (33) AND SIDE OF CONTACTED VEHICLE
- (34) AND REAR OF CONTACTED VEHICLE
- (36) ENDSWIPED BY CONTACTED VEHICLE
- (37) AND OBJECT
- (39) AND UNKNOWN OTHER VEHICLE CONFIGURATION

RIGHT SIDE OF CASE VEHICLE

- (41) AND FRONT OF CONTACTED VEHICLE (TYPE T)
- (42) AND FRONT OF CONTACTED VEHICLE (TYPE L)
- (43) AND SIDE OF CONTACTED VEHICLE (NOT SIDESWIPE)
- (44) AND REAR OF CONTACTED VEHICLE (TYPE T)
- (45) AND REAR OF CONTACTED VEHICLE (TYPE L)
- (46) SIDESWIPED BY CONTACTED VEHICLE
- (47) AND OBJECT
- (49) AND UNKNOWN OTHER VEHICLE CONFIGURATION

OTHER

- (57) VEHICLE TO OBJECT
- (58) VEHICLE TO VEHICLE
- (59) VEHICLE TO VEHICLE, CONFIGURATION UNKNOWN

ROLLOVER

- (61) LESS THAN 360°
- (62) 360° OR MORE
- (69) DETAILS UNKNOWN

UNKNOWN

- (99) IMPACT TYPE UNKNOWN

DAMAGE DA-4

CODES FOR VEHICLE/OBJECT CONTACTED

VEHICLE/OBJECT GROUPS

- (00) NO OBJECT
- (01) - (39) PASSENGER VEHICLE & TRUCK
- (40) - (69) OTHER VEHICLE
- (70) - (76) PEDESTRIAN & ON-ROADWAY OBJECT
- (77) - (97) OFF-ROADWAY OBJECT
- (98) OTHER (DESCRIBE)
- (99) UNKNOWN

PASSENGER VEHICLE

- (02) LARGE
- (03) LIMOUSINE
- (17) PICKUP
- (20) UNKNOWN PASSENGER VEHICLE BODY
- (24) SUB-MINI
- (25) MINI
- (26) SUB-COMPACT
- (27) COMPACT
- (28) INTERMEDIATE
- (29) FULL

SIZE	WHEELBASE
SUB-MINI	< 2286 mm (< 90")
MINI	2286 - 2412 mm (90" - 94.9")
SUB-COMPACT	2413 - 2539 mm (95" - 99.9")
COMPACT	2540 - 2666 mm (100" - 104.9")
INTERMEDIATE	2667 - 2793 mm (105" - 109.9")
FULL	2794 - 2920 mm (110" - 114.9")
LARGE	2921 - 3174 mm (115" - 124.9")
LIMOUSINE	> 3175 mm (> 125")

MULTIPURPOSE PASSENGER VEHICLE

- (11) SMALL VAN (MINI)
- (12) PICKUP
- (14) SMALL UTILITY (WHEELBASE LESS THAN 107",
E.G. JEEP, BRONCO)
- (15) LARGE UTILITY (WHEELBASE MORE THAN 107",
E.G. PANEL TRUCK, SUBURBAN)
- (16) PICKUP TRUCK WITH CANOPY/SHELL COVER
- (17) PICKUP CAR WITH CANOPY/SHELL COVER
- (21) MOTOR HOME
- (22) PICKUP TRUCK WITH SLIDE-IN CAMPER
- (23) PICKUP CAR WITH SLIDE-IN CAMPER
- (31) CHASSIS-MOUNTED CAMPER

TRUCK

- (11) SMALL VAN (E.G. ECONOLINE)
- (12) PICKUP TRUCK
- (13) UNKNOWN LIGHT TRUCK
- (15) LARGE UTILITY (E.G. PANEL TRUCK, SUBURBAN)
- (16) PICKUP TRUCK WITH CANOPY/SHELL COVER
- (22) PICKUP TRUCK WITH SLIDE-IN CAMPER
- (30) UNKNOWN TRUCK TYPE
- (31) CHASSIS-MOUNTED CAMPER
- (33) DELIVERY VAN (WALK-IN)
- (34) STRAIGHT TRUCK
- (35) TRUCK-TRACTOR (BOBTAIL)
- (36) CHASSIS-CAB
- (37) UNKNOWN HEAVY TRUCK
- (38) TRACTOR & SEMI-TRAILER (SEMI)
- (39) TRUCK (OR SEMI) & FULL TRAILER(S)

BUS

- (40) UNKNOWN BUS TYPE
- (41) SCHOOL BUS
- (42) INTERCITY BUS (BETWEEN CITIES)
- (43) TRANSIT BUS (INTRACITY)
- (44) STREETCAR (ON TRACKS)

MOTORCYCLE

- (50) UNKNOWN MOTORCYCLE TYPE
- (51) 1 - 75 cc
- (52) 76 - 125 cc
- (53) 126 - 250 cc
- (54) 251 - 500 cc
- (55) 501 - 750 cc
- (56) 751 cc +
- (57) 3-WHEELS (OR WITH SIDECAR)

SPECIAL PURPOSE VEHICLE

- (60) UNKNOWN/OTHER SPECIAL VEHICLE (DESCRIBE)
- (61) SNOWMOBILE
- (62) ATV (ALL TERRAIN VEHICLE)
- (63) AMPHIBIOUS VEHICLE
- (64) FARM VEHICLE
- (65) CONSTRUCTION VEHICLE
- (66) TRAILER, PRIVATE (CAMPER)
- (67) TRAILER, COMMERCIAL (CARGO)
- (68) TRAIN (CARS)
- (69) LOCOMOTIVE (ENGINE, SWITCHER)

OBJECT

- (70) PEDESTRIAN
- (71) BICYCLIST, OTHER PEDALCYCLIST
- (72) PEDESTRIAN CONVEYANCE (E.G. PERSON RIDING
ANIMAL, CART)
- (73) LARGE ANIMAL
- (74) FALLEN OBJECT (E.G. OBJECT DISLODGED FROM
OTHER VEHICLE, FALLEN TREE, ROCKS)
- (75) ROCKS
- (76) CONSTRUCTION EQUIPMENT (EXCLUDING (65))
- (77) SIGN POST, UTILITY POLE, TREE
- (78) DITCH
- (79) EMBANKMENT, SNOWBANK, RR TRACKS RR X
- (80) GROUND (ROLLOVER ONLY)
- (81) CURB (DAMAGE PRODUCING IMPACTS ONLY)
- (82) CULVERT
- (83) FENCE
- (84) HYDRANT, SHORT POST, STUMP
- (85) SMALL POST/TREE, RURAL MAIL BOX, MILE
MARKER, DELINEATOR
- (86) BUILDING
- (87) PIER, PILLAR, BRIDGE SUPPORT
- (88) ABUTMENT, RETAINING WALL
- (89) BRIDGE RAIL
- (90) GUARD RAIL, LEADING SECTION
- (91) GUARD RAIL, MIDDLE OR UNKNOWN
- (92) GUARD RAIL, TRAILING SECTION
- (93) GUARD POST (TIMBER, METAL, CONCRETE)
- (94) CABLE, FENCE BARRIER
- (95) CONCRETE BARRIER (MEDIAN)
- (96) IMPACT ATTENUATOR
- (97) BREAKAWAY FEATURES

Duplicate columns 1-8
from the previous card.

Module C R Format 0 1
9 10 11 12

CRASH RECONSTRUCTION CR-1

for ΔV

	CASE VEHICLE PRIMARY IMPACT		CASE VEHICLE SECONDARY IMPACT	
	CASE VEHICLE	CONTACTED VEHICLE	CASE VEHICLE	CONTACTED VEHICLE
EVENT NUMBER	<u>1</u> 13		<u> </u> 47	
ΔV (km/h) TOTAL	<u>014</u> 14 15 16	<u>013</u> 32 33 34	<u> </u> 48 49 50	<u> </u> 66 67 68
LONGITUDINAL*	<u>-014</u> 17 20	<u>-011</u> 35 38	<u> </u> 51 54	<u> </u> 69 72
LATERAL*	<u>-003</u> 21 24	<u>+006</u> 39 42	<u> </u> 55 58	<u> </u> 73 76
*NOTE: THESE ΔV COMPONENTS MUST INCLUDE SIGN.				
EXAMPLES: 10 km/h = ± 010 -7 km/h = -007				
ENERGY DISSIPATED BY CRUSH (kj)	<u>0012</u> 25 28	<u>0009</u> 43 46	<u> </u> 59 62	<u> </u> 77 80
RECONSTRUCTION				
(01) RECONSTRUCTED, UNKNOWN CONFIDENCE LEVEL	<u>02</u> 29 30		<u> </u> 63 64	
(21) RECONSTRUCTED, LOW CONFIDENCE LEVEL				
(22) RECONSTRUCTED, MODERATE CONFIDENCE LEVEL				
(23) RECONSTRUCTED, HIGH CONFIDENCE LEVEL				
NOT RECONSTRUCTED BECAUSE				
(02) INSUFFICIENT DATA				
(03) EXCESSIVE UNDERRIDE/ OVERRIDE				
(04) ROLLOVER				
(05) VAULTING				
(06) OTHER TRAVEL IN MORE THAN ONE PLANE				
(07) NON-HORIZONTAL FORCE				
(08) SIDESWIPE-TYPE DAMAGE				
(09) YIELDING OBJECT				
(10) OTHER: _____				
(11) AT LEAST ONE VEHICLE BEYOND SCOPE				
(12) OTHER VEHICLE NOT INSPECTED				
MODE				
(1) CDC ONLY	<u>2</u> 31		<u> </u> 65	
(2) CDC & DETAILED DAMAGE				
(3) TRAJECTORY & CDC				
(4) TRAJECTORY & CDC & DETAILED DAMAGE				
(5) NOT RECONSTRUCTED				
COMPUTER PROGRAM SPECIFY: <u>SMAS II</u>				

Duplicate columns 1-8 from the previous card.		Module <u>C</u> <u>R</u> Format <u>0</u> <u>2</u> 9 10 11 12		CRASH RECONSTRUCTION CR-2 for EBS			
		CASE VEHICLE PRIMARY IMPACT			CASE VEHICLE SECONDARY IMPACT		
		CASE VEHICLE	CONTACTED VEHICLE		CASE VEHICLE	CONTACTED VEHICLE	
EVENT NUMBER		<u>1</u> 13			<u>47</u>		
EBS (km/h)	TOTAL	<u>016</u> 14 15 16	<u>011</u> 32 33 34		<u> </u> 48 49 50	<u> </u> 66 67 68	
	LONGITUDINAL*	<u>-016</u> 17 20	<u>-010</u> 35 38		<u> </u> 51 54	<u> </u> 69 72	
	LATERAL*	<u>-003</u> 21 24	<u>+006</u> 39 42		<u> </u> 55 58	<u> </u> 73 76	
*NOTE: THESE EBS COMPONENTS MUST INCLUDE SIGN.							
EXAMPLES: 10 km/h = ±010 -7 km/h = -007							
ENERGY DISSIPATED BY CRUSH (kJ)		<u>0012</u> 25 28	<u>0009</u> 43 46		<u> </u> 59 62	<u> </u> 77 80	
RECONSTRUCTION							
(01) RECONSTRUCTED, UNKNOWN CONFIDENCE LEVEL		<u>22</u> 29 30			<u> </u> 63 64		
(21) RECONSTRUCTED, LOW CONFIDENCE LEVEL							
(22) RECONSTRUCTED, MODERATE CONFIDENCE LEVEL							
(23) RECONSTRUCTED, HIGH CONFIDENCE LEVEL							
NOT RECONSTRUCTED BECAUSE							
(02) INSUFFICIENT DATA							
(03) EXCESSIVE UNDERRIDE/ OVERRIDE							
(04) ROLLOVER							
(05) VAULTING							
(06) OTHER TRAVEL IN MORE THAN ONE PLANE							
(07) NON-HORIZONTAL FORCE							
(08) SIDESWIPE-TYPE DAMAGE							
(09) YIELDING OBJECT							
(10) OTHER: _____							
(11) AT LEAST ONE VEHICLE BEYOND SCOPE							
(12) OTHER VEHICLE NOT INSPECTED							
MODE							
(1) CDC ONLY		<u>2</u> 31			<u> </u> 65		
(2) CDC & DETAILED DAMAGE							
(3) TRAJECTORY & CDC							
(4) TRAJECTORY & CDC & DETAILED DAMAGE							
(5) NOT RECONSTRUCTED							
COMPUTER PROGRAM SPECIFY: <u>SMASH</u>							

Duplicate columns 1-8
from the previous card.

Module C R Format 0 3
9 10 11 12

CRASH RECONSTRUCTION CR-3

- NOTES:
1. ENTER CRASH RECONSTRUCTION DAMAGE MEASUREMENTS IN CENTIMETERS.
 2. MEASURE C_1 TO C_6 FROM DRIVER TO PASSENGER SIDE IN FRONT OR REAR IMPACTS, REAR TO FRONT IN SIDE IMPACTS.
 3. D IS POSITIVE IF MEASURED TO A POINT FORWARD OF OR TO THE RIGHT OF THE CG.
 4. USE THE CENTER OF THE WHEELBASE AS THE CG.

CASE VEHICLE

LOCATOR

Locate the end of the damage with respect to the vehicle longitudinal center line, or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L
1	BEGINS AT RIGHT-FRONT BUMPER CORNER TO BUMPER CORNER 51	BUMPER CORNER TO BUMPER CORNER

UEW = 152

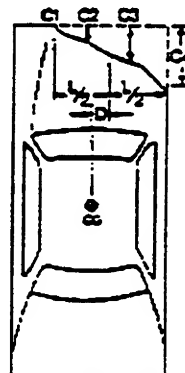
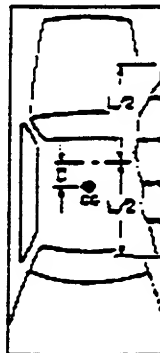
SIZE =

STIFF =

WEIGHT w/OCC 7149

PLANE:

- (1) Bumper
- (2) Above Bumper
- (3) Sill
- (4) Above Sill
- (5) Other
- (9) Unknown



DL _____

UDL _____

CRUSH PROFILE IN CENTIMETERS

NOTE: Each line in the table below is a separate record (card).

Duplicate columns 1 - 12 for each completed line.

Specific Impact Number	Plane of Impact C-Measur.	Direct Damage		Field L	C ₁	C ₂	C ₃	C ₄	C ₅	C ₆	±D
		Length (DDL)	Max Crush								
1	1	51	20	116	16	13.5	12.8	14	18	20	+52.5
BUMPER COVER			9		-9	-9	-9	-9	-9	-9	
FRONT SPACE			7		7	4	2	2	4	7	
TOTAL			4		0	.5	1.9	3	5	4	
ABOVE BUMPER			16.5		0	0	4	10	11	16.5	
			10.25 Average								
1	1	051	017	116	000	001	002	003	005	010	+051
13	14	15 16 17	18 19 20	21 22 23	24 25 26	27 28 29	30 31 32	33 34 35	36 37 38	39 40 41	42 43 44 45
2											

Duplicate columns 1-8
from the previous card.Module C B Format 0 4
9 10 11 12

CRASH RECONSTRUCTION CR-4

NOTES:

1. ENTER CRASH RECONSTRUCTION DAMAGE MEASUREMENTS IN CENTIMETERS.
2. MEASURE C_1 TO C_6 FROM DRIVER TO PASSENGER SIDE IN FRONT OR REAR IMPACTS, REAR TO FRONT IN SIDE IMPACTS.
3. D IS POSITIVE IF MEASURED TO A POINT FORWARD OF OR TO THE RIGHT OF THE CG.
4. USE THE CENTER OF THE WHEELBASE AS THE CG.

OTHER VEHICLE

LOCATOR

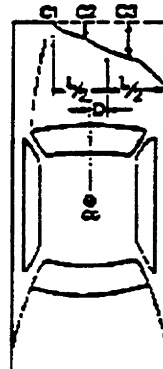
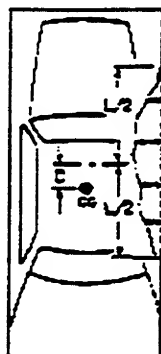
Locate the end of the damage with respect to the vehicle longitudinal center line, or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L
1	BEGINS AT LEFT-FRONT BUMPER CORNER TO BUMPER CORNER -66cm BUMPER CORNER	

UEW = 143
 SIZE =
 STIFF =
 WEIGHT W/OCC = 1317

PLANE:

- (1) Bumper
- (2) Above Bumper
- (3) Sill
- (4) Above Sill
- (5) Other _____
- (9) Unknown



STRINGLINE WAS SET AT
 340 CM FROM REAR AXLE
 SHOULD HAVE BEEN 334
 SUBTRACT 6CM FROM
 ALL C-MEASUREMENTS

DL _____

UDL _____

CRUSH PROFILE IN CENTIMETERS

NOTE: Each line in the table below is a separate record (card).

Duplicate columns 1 - 12 for each completed line.

Specific Impact Number	Plane of Impact C-Measur.	Direct Damage		Field L	C ₁	C ₂	C ₃	C ₄	C ₅	C ₆	±D
		Length (DDL)	Max Crush								
1	1	66	23	143	20.5	10	7.5	8	11.5	23	-38.5
	Bumper Free space	7			7	5	2	2	5	7	
	⊖ Stringline adjustment	6			-6	-6	-6	-6	-6	-6	
	TOTAL	10			7.5	0	0	0	5	10	
1	1	066	010	143	008	000	000	000	001	010	-039
13	14	15 16 17	18 19 20	21 22 23	24 25 26	27 28 29	30 31 32	33 34 35	36 37 38	39 40 41	42 43 44 45
2											

Duplicate columns 1-8
from the previous card.

Module W I Format 0 1
9 10 11 12

WHEELS AND TIRES

WT-1

WHEELS--DAMAGED

- (0) NO
(1) YES
(9) UNKNOWN

LF 0
13
RF 1
RR 0
LR 0
16

SIZE (NOT DOT CODE. IF UNKNOWN, USE 9'S)

LF P18565R15
25
RF _____
35
RR _____
45
LR _____
55

TIRE TREAD TYPE

- (1) REGULAR
(2) SNOW
(3) SLICKS
(4) ALL WEATHER (MS)
(7) OTHER: _____
(9) UNKNOWN

LF 4
17
RF 4
RR 4
LR 4
20

CARCASS CONSTRUCTION

- (1) BIAS
(2) BELTED BIAS
(3) RADIAL
(4) ELLIPTICAL
(5) HI PRESSURE SPARE
(6) SPACE SAVER SPARE
(7) OTHER: _____
(9) UNKNOWN

LF 3
21
RF 3
RR 3
LR 3
24

IF VEHICLE IS EQUIPPED WITH DUAL
WHEELS, COMPLETE FOR OUTER WHEELS
AND MAKE NOTES ON INNER WHEELS.

NOTES: _____

Duplicate columns 1-8 from the previous card.		Module <u>F</u> <u>I</u> Format <u>0</u> <u>1</u> 9 10 11 12		FUEL AND FUEL TANKS FT-1	
TYPE OF PROPULSIVE FUEL (1) GASOLINE (2) DIESEL OIL (3) LPG (4) ELECTRIC (7) OTHER: _____ (9) UNKNOWN	<u>1</u> 13	AUXILIARY TANK TYPE (1) OEM TANK (2) AFTER MARKET TANK (8) NOT APPLICABLE (NOT EQUIPPED) (9) UNKNOWN	<u>8</u> 21		
MAIN TANK LOCATION	<u>322</u> 14 16	AUXILIARY TANK LOCATION	<u>888</u> 22 24		
MAIN FILLER CAP LOCATION	<u>113</u> 17 19	AUXILIARY FILLER CAP LOCATION	<u>888</u> 25 27		
MAIN TANK MATERIAL	<u>9</u> 20	AUXILIARY TANK MATERIAL	<u>8</u> 28		

TANK AND FILLER CAP LOCATION CODES

FIRST DIGIT (LONGITUDINAL)

 (1) BEHIND KICK-UP
 (2) IN KICK-UP
 (3) BETWEEN KICK-UP & COWL
 (4) FORWARD OF COWL
 (8) NOT APPLICABLE (NOT EQUIPPED)
 (9) UNKNOWN

SECOND DIGIT (LATERAL)

 (1) LEFT OF FRAME
 (2) WITHIN FRAME OR CENTERED
 (3) RIGHT OF FRAME
 (4) DUAL, RIGHT & LEFT TANKS
 (8) NOT APPLICABLE (NOT EQUIPPED)
 (9) UNKNOWN

THIRD DIGIT (VERTICAL)

 (1) BELOW FRAME
 (2) WITHIN FRAME OR CENTERED
 (3) ABOVE FRAME
 (8) NOT APPLICABLE (NOT EQUIPPED)
 (9) UNKNOWN

TANK MATERIAL CODES

 (1) STEEL
 (2) ALUMINUM
 (3) PLASTIC
 (7) OTHER
 (8) NOT APPLICABLE (NOT EQUIPPED)
 (9) UNKNOWN

Duplicate columns 1-8
from the previous card.

Module F 1 Format 0 1
9 10 11 12

FUEL LEAKAGE FL-1

DID FUEL LEAKAGE RESULT FROM A CRASH EVENT

(0) NO KNOWN LEAKAGE SKIP PAGE.

0
13

(1) YES COMPLETE PAGE.

LEAK NUMBER	I LEAKING COMPONENT	II COMPONENT SOURCE	III TYPE OF DAMAGE	IV SEVERITY OF DAMAGE	V LOCATION OF LEAK	EVENT NUMBER
#1	<u> </u> <u> </u> 14 15	<u> </u>	<u> </u>	<u> </u>	<u> </u> <u> </u>	<u> </u> 21
#2	<u> </u> <u> </u> 22 23	<u> </u>	<u> </u>	<u> </u>	<u> </u> <u> </u>	<u> </u> 29
#3	<u> </u> <u> </u> 30 31	<u> </u>	<u> </u>	<u> </u>	<u> </u> <u> </u>	<u> </u> 37
#4	<u> </u> <u> </u> 38 39	<u> </u>	<u> </u>	<u> </u>	<u> </u> <u> </u>	<u> </u> 45
#5	<u> </u> <u> </u> 46 47	<u> </u>	<u> </u>	<u> </u>	<u> </u> <u> </u>	<u> </u> 53

I LEAKING COMPONENT

TANK AREA

- (11) MAIN FUEL TANK (INCLUDING VAPOR RECOVERY DOME)
- (12) AUXILIARY FUEL TANK
- (13) MAIN TANK FILLER TUBE
- (14) MAIN TANK CAP (GAS CAP)
- (15) AUXILIARY TANK FILLER TUBE
- (16) AUXILIARY TANK CAP (GAS CAP)
- (19) TANK AREA, DETAILS UNKNOWN

DELIVERY SYSTEM

- (21) FUEL FEED LINE (MAIN TANK TO FUEL PUMP)
- (22) FUEL FEED LINE (AUXILIARY TANK TO FUEL PUMP)
- (23) FUEL RETURN LINE (FUEL PUMP TO TANK)
- (24) INLINE FUEL FILTER
- (25) FUEL LINE (PUMP TO CARBURETOR OR INJECTOR PUMP)
- (26) CARBURETOR TO INJECTOR PUMP
- (27) FUEL PUMP
- (29) DELIVERY SYSTEM, DETAILS UNKNOWN

EVAPORATIVE EMISSION CONTROL SYSTEM

- (31) ATMOSPHERIC VENT PIPE (NON-EEC EQUIPPED)
- (32) EEC PIPE (VAPOR CANISTER TO CARBURETOR)

EEC SYSTEM (CONTINUED)

- (33) VAPOR RECOVERY HOSES (CANISTER TO CARBURETOR)
- (34) LIQUID-VAPOR SEPARATOR (UNLESS PART OF TANK)
- (35) CANISTER
- (39) EEC SYSTEM, DETAILS UNKNOWN

- (49) ENGINE COMPARTMENT, COMPONENT UNKNOWN
- (99) COMPONENT UNKNOWN

II COMPONENT SOURCE

- (1) OEM
- (2) AFTER MARKET
- (9) UNKNOWN

III TYPE OF DAMAGE

- (1) DENTED/CRUSHED
- (2) PUNCTURED
- (3) RUPTURED
- (4) SEVERED/GROSS TEARS
- (5) DISCONNECTED/DEFEATED
- (9) UNKNOWN

IV SEVERITY OF DAMAGE

- (1) MINOR
- (2) MODERATE
- (3) SEVERE
- (4) DISCONNECTED/DEFEATED
- (9) UNKNOWN

V LOCATION OF LEAK

FIRST DIGIT (LONGITUDINAL LOCATION)

- (1) F, FORWARD OF COWL
- (2) P, BETWEEN COWL & REAR BULKHEAD
- (3) B, BEHIND REAR BULKHEAD
- (4) Y, F, & P
- (5) Z, P, & B
- (6) D, DISTRIBUTED (F, P & B)
- (9) UNKNOWN

SECOND DIGIT (LATERAL LOCATION)

- (1) L, LEFT
- (2) C, CENTER
- (3) R, RIGHT
- (4) Y, LEFT CENTER (L & C)
- (5) Z, RIGHT CENTER (R & C)
- (6) D, DISTRIBUTED (F, P & B)
- (9) UNKNOWN

Duplicate columns 1-8
from the previous card.

Module F R Format 0 1
9 10 11 12

FIRE FR-1

WAS THERE FIRE IN OR ON CASE VEHICLE?

(0) NO SKIP PAGE.

(1) YES COMPLETE PAGE.

0
13

DID FIRE START IN CASE VEHICLE?

- (0) NO
(1) YES
(9) UNKNOWN

14

SEVERITY OF FIRE DAMAGE

- (1) MINOR
(2) MODERATE
(3) SEVERE
(9) UNKNOWN

16

FLAME PROPOGATION RATE

- (1) RAPID/EXPLOSIVE
(2) SLOW/MODERATE
(9) UNKNOWN

15

DID AN INJURY TO CASE
VEHICLE OCCUPANT RESULT FROM
FIRE IN OR ON CASE VEHICLE?

- (0) NO
(1) YES
(9) UNKNOWN

17

PROVIDE NOTES IF FIRE OCCURRED.

Duplicate columns 1-8
from the previous card.Module E D Format 0 1
9 10 11 12

EXTERIOR DAMAGE

ED-1

HOOD PERFORMANCE

FOR THE FOLLOWING, USE CODES:

- (0) NO
(1) YES
(8) NOT APPLICABLE
(9) UNKNOWN

HOOD LATCH(ES)-

-RELEASED

1
13

-DAMAGED

1
14

-JAMMED

0
15

HOOD HINGES-

-LEFT,

DAMAGED

1
16

-LEFT,

SEPARATED
(COMPLETE)0
17

-RIGHT,

DAMAGED

1
18

-RIGHT,

SEPARATED
(COMPLETE)0
19

HOOD REMAINED ON VEHICLE

1
20

REAR EDGE OF HOOD-

-ELEVATED

1
21

-CONTACTED WINDSHIELD

0
22

-PENETRATED WINDSHIELD

8
23

HOOD LATCH LOCATION

- (1) FRONT OF VEHICLE
(2) COWL AREA
(3) SIDE
(8) NOT APPLICABLE
(9) UNKNOWN

1
24

ENGINE OR TRANSMISSION MOUNT

SEPARATION (COMPLETE)

- (0) NO
(1) YES
(9) UNKNOWN

0
25

STEERING COL FLEXIBLE COUPLING

FLEXIBLE COUPLING TYPE

- (0) NONE
(1) FLEXIBLE MATERIAL
(2) POT
(3) SINGLE U-JOINT
(4) DOUBLE U-JOINT
(5) FLEXIBLE CABLE
(6) COMBINATION OF ABOVE
(CIRCLE EACH)
(7) OTHER: _____
(8) EQUIPPED, TYPE UNKNOWN
(9) UNKNOWN, IF EQUIPPED

9
26

COUPLING-

-DAMAGED

9
27(USE CODES
FROM HOOD
PERFORMANCE)-SEPARATED
(COMPLETE)9
28

ENG COMPART TELESCOPING UNIT

TYPE OF UNIT

- (00) NONE INSTALLED
(01) - (07) SEE UNITS ON PAGE ED-2
(88) NOT COLLECTED
(97) OTHER: _____
(98) EQUIPPED, TYPE UNKNOWN
(99) UNKNOWN IF EQUIPPED

8 8
29 30

ORIGINAL LENGTH (mm)

F (OR H): _____

TELESCOPED LENGTH (mm)

G: _____

DIFFERENCE (mm)

F (OR H) - G

(IF LESS THAN 15mm, ENTER "000".)

- (888) NOT COLLECTED
(991) NOT MEASURED/NO
COMPRESSION
(992) COMPRESSED, AMOUNT
UNKNOWN
(993) DEVICE EXTENDED
(997) UNABLE TO BE MEASURED
(998) NOT APPLICABLE (NOT
EQUIPPED)
(999) UNKNOWN

8 8 8
31 32 33

EXTERIOR DAMAGE

ED-2

LEFT-SIDE BODY MOUNT

DID BODY MOUNT SEPARATE?

- (0) NO
 (1) YES
 (8) NOT APPLICABLE
 (9) UNKNOWN

8
34

LEFT PILLARS

PILLARS SEPARATED COMPLETELY -

USE CODES:

- (0) NO
 (1) YES
 (4) NO SEPARATION, BUT DAMAGED
 (8) NOT APPLICABLE (NOT EQUIPPED)
 (9) UNKNOWN

-A-PILLAR, UPPER

0
35

LOWER

0
36

-B-PILLAR, UPPER

0
37

LOWER

0
38

-C-PILLAR, UPPER

0
39

LOWER

0
40

-D-PILLAR, UPPER

8
41

LOWER

8
42

LEFT DOORS

HOW DID DOORS
OPEN DURING COLLISION?

USE CODES:

(0) DOOR DID NOT OPEN

OPENED BECAUSE OF

- (1) HINGE AREA SEPARATION
 (2) DOOR-LATCH SEPARATION
 (3) LATCH-STRIKER SEPARATION
 (4) STRIKER-PILLAR SEPARATION
 (5) BODY DISTORTION
 (6) COMBINATION OF ABOVE
 (CIRCLE EACH)
 (7) OPENED, REASON UNKNOWN

(8) NOT APPLICABLE (NO DOOR)

(9) UNKNOWN

-FRONT

0
43

-REAR

0
44

DOORS JAMMED CLOSED-

USE CODES:

- (0) NO
 (1) YES
 (8) NOT APPLICABLE (NO DOOR)
 (9) UNKNOWN

-FRONT

0
45

-REAR

0
46

EXTERIOR DAMAGE

ED-3

REAR DOOR

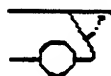
REAR DOOR TYPE

- (0) NO DOOR (INCLUDES PICKUPS)
- (1) HATCHBACK
- (2) ONE-WAY TAILGATE
- (3) TWO-WAY TAILGATE
- (4) CLAMSHELL/DISAPPEARING TAILGATE
- (5) SINGLE DOOR
- (6) DOUBLE DOOR
- (9) UNKNOWN

Hatchback



One-way



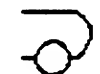
Two-way



or



Clamshell



Single door



Double door

HOW DID DOOR
OPEN DURING COLLISION?

- (0) DOOR DID NOT OPEN

OPENED BECAUSE OF

- (1) HINGE AREA SEPARATION
- (2) DOOR-LATCH SEPARATION
- (3) LATCH-STRIKER SEPARATION
- (4) STRIKER-PILLAR SEPARATION
- (5) BODY DISTORTION
- (6) COMBINATION OF ABOVE
(CIRCLE EACH)
- (7) OPENED, REASON UNKNOWN
- (8) NOT APPLICABLE (NO DOOR)
- (9) UNKNOWN

DOOR JAMMED CLOSED

- (0) NO
- (1) YES
- (8) NOT APPLICABLE (NO DOOR)
- (9) UNKNOWN

0
47

8
48

8
49

OTHER REAR DAMAGE

WAS PARTITION TO LUGGAGE AREA
DAMAGED DURING COLLISION?

- (0) NO
- (1) YES
- (8) NOT APPLICABLE
- (9) UNKNOWN

0
50

SPARE TIRE

- (0) NO SPARE TIRE
- (1) NOT ATTACHED BEFORE COLLISION
- (2) ATTACHED, NOT SEPARATED IN COLLISION
- (3) ATTACHED, SEPARATED DUE TO COLLISION
- (8) NOT COLLECTED
- (9) UNKNOWN

8
51

TRAILER HITCH TYPE

- (0) NO HITCH

BALL-AND-SOCKET TYPES

- (1) TEMPORARY FRAMEWORK (E.G. RENTAL CLAMP-ON)
- (2) BUMPER-MOUNT ONLY (E.G. LIGHT TRUCK)
- (3) BUMPER-AND-FRAME (BUT NON-EQUALIZING)
- (4) LOAD EQUALIZING

OTHER TYPES

- (5) RING-AND-PINTLE
- (6) FIFTH-WHEEL (INCL. P/U)
- (7) OTHER (E.G. CLEVIS-AND-PIN)

- (8) EQUIPPED, TYPE UNKNOWN
- (9) UNKNOWN IF EQUIPPED

0
52

TRAILER TYPE
(AT TIME OF COLLISION)

- (0) NO TRAILER
- (1) TRAVEL-TRAILER/CAMPER
- (2) MOBILE HOME
- (3) BOAT/SNOWMOBILE/ATV TRAILER
- (4) UTILITY TRAILER
- (5) TOWED CAR
- (7) OTHER: _____
- (8) TRAILER, TYPE UNKNOWN
- (9) UNKNOWN

0
53

EXTERIOR DAMAGE		ED-4
RIGHT-SIDE BODY MOUNT DID BODY MOUNT SEPARATE? (0) NO (1) YES (8) NOT APPLICABLE (9) UNKNOWN	<div style="text-align: center;">8 54</div>	RIGHT DOORS HOW DID DOORS OPEN DURING COLLISION? USE CODES: (00) DOOR DID NOT OPEN OPENED BECAUSE OF (01) HINGE AREA SEPARATION (02) DOOR-LATCH SEPARATION (03) LATCH-STRIKER SEPARATION (04) STRIKER-PILLAR SEPARATION (05) BODY DISTORTION (06) COMBINATION OF ABOVE (CIRCLE EACH) (07) OPENED, REASON UNKNOWN (11) VAN RIGHT-REAR DOOR OPENED (ANY MECHANISM) (98) NOT APPLICABLE (NO DOOR) (99) UNKNOWN
RIGHT PILLARS PILLARS SEPARATED COMPLETELY - USE CODES: (0) NO (1) YES (4) NO SEPARATION, BUT DAMAGED (8) NOT APPLICABLE (NOT EQUIPPED) (9) UNKNOWN	<div style="text-align: center;">0 55</div> <div style="text-align: center;">0 56</div> <div style="text-align: center;">0 57</div> <div style="text-align: center;">0 58</div> <div style="text-align: center;">0 59</div> <div style="text-align: center;">0 60</div> <div style="text-align: center;">8 61</div> <div style="text-align: center;">8 62</div>	<div style="text-align: right;">-FRONT</div> <div style="text-align: right;">-REAR</div> <div style="text-align: right;">-FRONT</div> <div style="text-align: right;">-REAR</div>
-A-PILLAR, UPPER LOWER -B-PILLAR, UPPER LOWER -C-PILLAR, UPPER LOWER -D-PILLAR, UPPER LOWER		<div style="text-align: right;">00 63 64</div> <div style="text-align: right;">00 65 66</div> <div style="text-align: right;">0 67</div> <div style="text-align: right;">0 68</div>
		DOORS JAMMED CLOSED- USE CODES: (0) NO (1) YES (8) NOT APPLICABLE (NO DOOR) (9) UNKNOWN
		<div style="text-align: right;">-FRONT</div> <div style="text-align: right;">-REAR</div>
		VAN REAR DOOR TYPE (0) VAN, NO REAR DOOR (1) TRACK (SLIDING) - RIGHT SIDE (2) SINGLE-HINGED - RIGHT SIDE (3) DOUBLE-HINGED - RIGHT SIDE (4) TRACK (SLIDING) - RIGHT & LEFT SIDE (5) SINGLE-HINGED - RIGHT & LEFT SIDE (6) DOUBLE-HINGED - RIGHT & LEFT SIDE (7) TRACK AND HINGED COMBINATION (8) NOT APPLICABLE (NOT A VAN) (9) UNKNOWN

EXTERIOR DAMAGE

ED-5

WINDSHIELD DAMAGE

WINDSHIELD CRACKED

- (0) NO
 (1) YES
 (8) NOT APPLICABLE
 (9) UNKNOWN

WINDSHIELD BROKEN
(PLASTIC INTERLAYER TORN)

- (0) NO
 (1) YES
 (8) NOT APPLICABLE
 (9) UNKNOWN

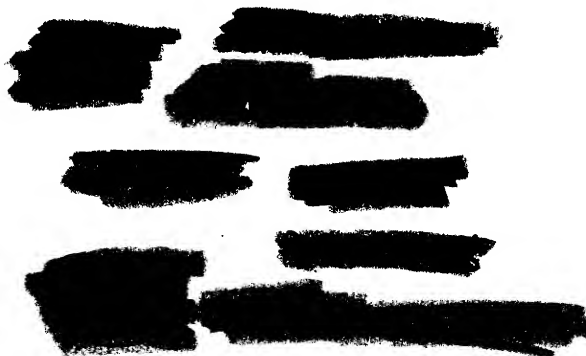
CRACKED OR BROKEN
BY OCCUPANT CONTACT

- (0) NO
 (1) YES
 (8) NOT APPLICABLE
 (9) UNKNOWN

EXTENT OF BOND SEPARATION

- (0) NONE
 (1) 1 - 20%
 (2) 21 - 40
 (3) 41 - 60
 (4) 61 - 80
 (5) 81 - 99
 (6) TOTAL
 (7) SEPARATED, AMOUNT
 UNKNOWN
 (8) NOT APPLICABLE
 (9) UNKNOWN

WINDSHIELD MARK ON CASE VEHICLE:



WINDSHIELD CODE

- (97) DESCRIBED BUT NOT CODED
 (98) NOT APPLICABLE (NO WINDSHIELD)
 (99) UNKNOWN

97
 74 75

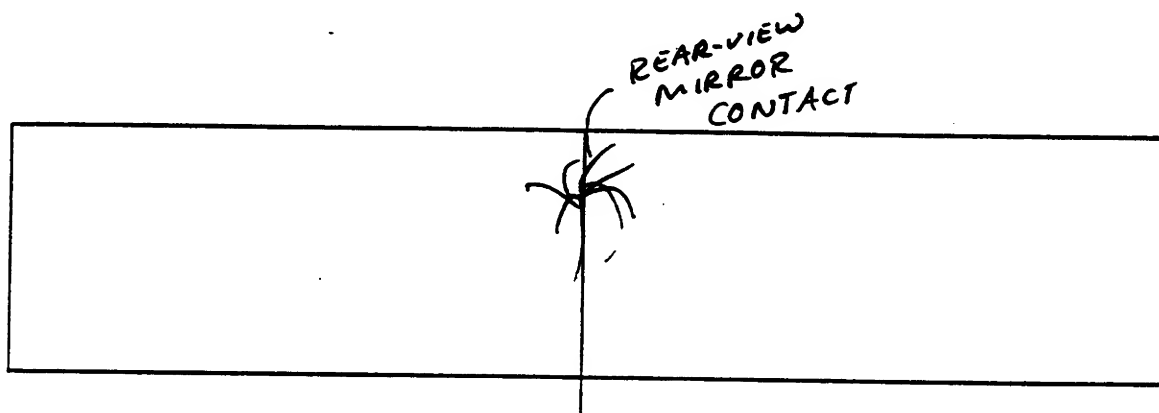
ROOF

DID T-ROOF/SUN ROOF OPEN
DURING COLLISION?

- (0) NO
 (1) YES
 (8) NOT APPLICABLE
 (NOT A T-ROOF OR SUN ROOF)
 (9) UNKNOWN

00
 76

LOCATE AREA OF WINDSHIELD INTEREST OR DAMAGE WITH DIMENSIONS (VERTICAL & HORIZONTAL) ON THIS DIAGRAM OF THE WINDSHIELD AS VIEWED FROM INSIDE.



L

C

R

Duplicate columns 1-8
from the previous card.

Module S C Format 0 1
9 10 11 12

STEERING WHEEL AND COLUMN SC-1

STEERING WHEEL

STEERING WHEEL RIM DAMAGE

- (0) NONE
(1) DEFORMED SLIGHTLY
(2) SEVERELY BENT
(3) BROKEN
(9) UNKNOWN

0
13

NUMBER OF STEERING WHEEL SPOKES

- (9) UNKNOWN

2
14

STEERING WHL SPOKE DAMAGE

- (0) NONE
(1) DEFORMED SLIGHTLY
(2) SEVERELY BENT
(3) BROKEN
(9) UNKNOWN

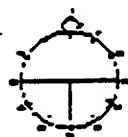
0
15

STEERING WHEEL POSITION AT TIME OF COLLISION

IN WHAT O'CLOCK POSITION WAS THE
NORMAL TOP OF THE WHEEL POINTED
WHEN THE COLLISION OCCURRED?

EXAMPLES

O'CLOCK = 1 2



(NORMAL STRAIGHT
AHEAD)

O'CLOCK = 0 2



O'CLOCK = 12

(99) UNKNOWN

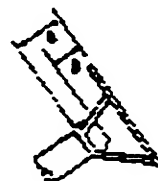
STEERING WHEEL ENERGY ABSORBING DEVICE

(1) EXAMPLES:



BARRACUDA, 70 - 74
CHALLENGER, 70 - 74
CAPRI, 71 - 77

(2) EXAMPLES:



OMNI, 78 -
HORIZON, 78 -

STEERING COLUMN OPTIONS

TILT FEATURE

- (0) NOT EQUIPPED
(1) YES, EQUIPPED, UNK POSITION
(2) UP
(3) MIDDLE
(4) LOWER
(9) UNKNOWN IF EQUIPPED

2
16

SWING-AWAY FEATURE

- (0) NOT EQUIPPED
(1) YES, EQUIPPED
(9) UNKNOWN IF EQUIPPED

0
17

TELESCOPING FEATURE

- (0) NOT EQUIPPED
(1) YES, EQUIPPED
(9) UNKNOWN IF EQUIPPED

0
18

TYPE OF DEVICE

- (0) NONE
(1) CONVOLUTED OR MESH CYLINDER
(2) DEEP DISH STEERING WHEEL
(7) OTHER: _____
(8) NOT COLLECTED
(9) UNKNOWN IF EQUIPPED

8
19

ORIGINAL DIMENSION (mm)

A: _____

DAMAGE DIMENSION (mm)

B: _____

DIFFERENCE (mm)

A - B

- (888) NOT COLLECTED
(991) NOT MEASURED/NO APPARENT
COMPRESSION
(992) COMPRESSED, AMOUNT UNKNOWN
(993) DEVICE EXTENDED
(997) UNABLE TO MEASURE
(998) NOT APPLICABLE (NOT EQUIPPED)
(999) UNKNOWN

8 8 8
20 21 22

STEERING WHEEL AND COLUMN SC-2

STEERING COLUMN
ENERGY ABSORBING DEVICE

TYPE OF DEVICE * (IF 27 OR 28)

- (00) NOT EQUIPPED
(88) NOT COLLECTED
(99) UNKNOWN

8 8
23 24

ORIGINAL LENGTH (mm)

C: _____

COMPRESSED LENGTH (mm)

D: _____

BRACKET DEFLECTION (IF CODE 36, 48,
OR 49 ABOVE)

OR

COMPRESSION (OR EXTRUSION) (mm)

C - D (OR E) (TOLERANCE: ± 10)

- (888) NOT COLLECTED
(991) NOT MEASURED/NO APPARENT
COMPRESSION
(992) COMPRESSED, AMOUNT UNKNOWN
(993) DEVICE EXTENDED
(997) UNABLE TO BE MEASURED
(998) NOT APPLICABLE (NOT EQUIPPED)
(999) UNKNOWN

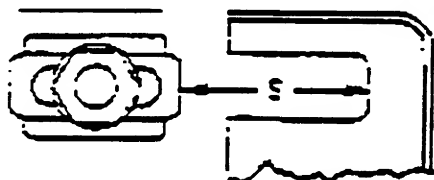
8 8 8
25 27

* (ADD A & B FOR TOTAL COMPRESSION)

SHEAR CAPSULE SEPARATION (mm)

S (USE AVG. OF LEFT & RIGHT CAPSULES.)

LT:



RT:

- (888) NOT COLLECTED
(991) NOT MEASURED/NO APPARENT
SEPARATION
(992) SEPARATED, AMOUNT UNKNOWN
(997) UNABLE TO BE MEASURED
(998) NOT APPLICABLE (NOT EQUIPPED)
(999) UNKNOWN

8 8 8
28 30

COLUMN VERTICAL ROTATION

- (0) NO APPARENT ROTATION
(1) UPWARD APPARENT ROTATION
(2) DOWNWARD APPARENT ROTATION
(9) UNKNOWN

0
31

COLUMN LATERAL ROTATION

- (0) NO APPARENT ROTATION
(1) LEFT APPARENT ROTATION
(2) RIGHT APPARENT ROTATION
(9) UNKNOWN

0
32

STEERING WHEEL (CONTINUED)

STEERING WHEEL HUB DAMAGE

- (0) NONE
(1) OCCUPANT CONTACT
(2) AIRBAG
(3) OTHER _____
(9) UNKNOWN

0
33

INTRUSION IT-1

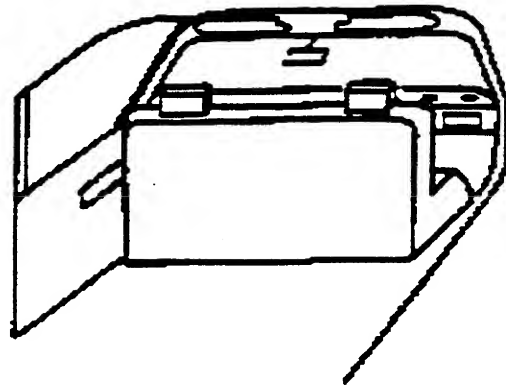
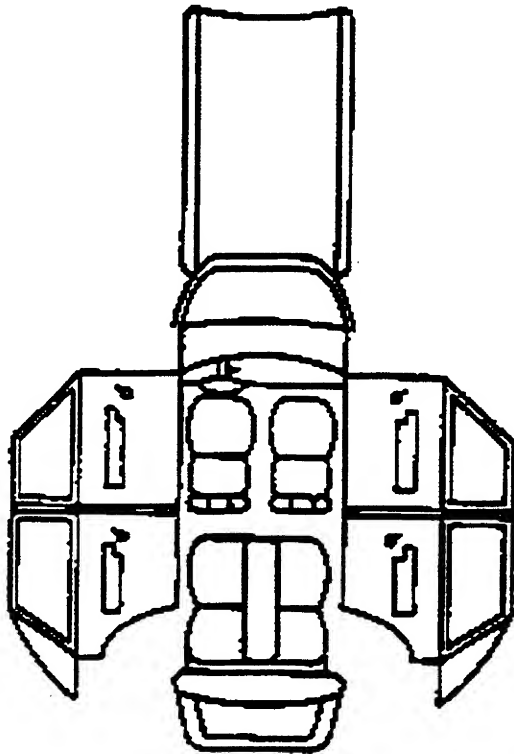
[illegible]

OCCUPANT CONTACT WORKSHEET

Contact	Interior Component Contacted	Occupant No. if Known	Body Region if Known	Supporting Physical Evidence	Confidence Level of Contact Point
A	LOWER IP	1	KNU	6CM SCUFF (RT)	1
B	LOWER IP	1	thigh	3CM SCUFF (LT)	1
C	AIRBAG COIL	1	ARM	11CM SCUFF	2
D					
E					
F					
G					
H					
I					
J					

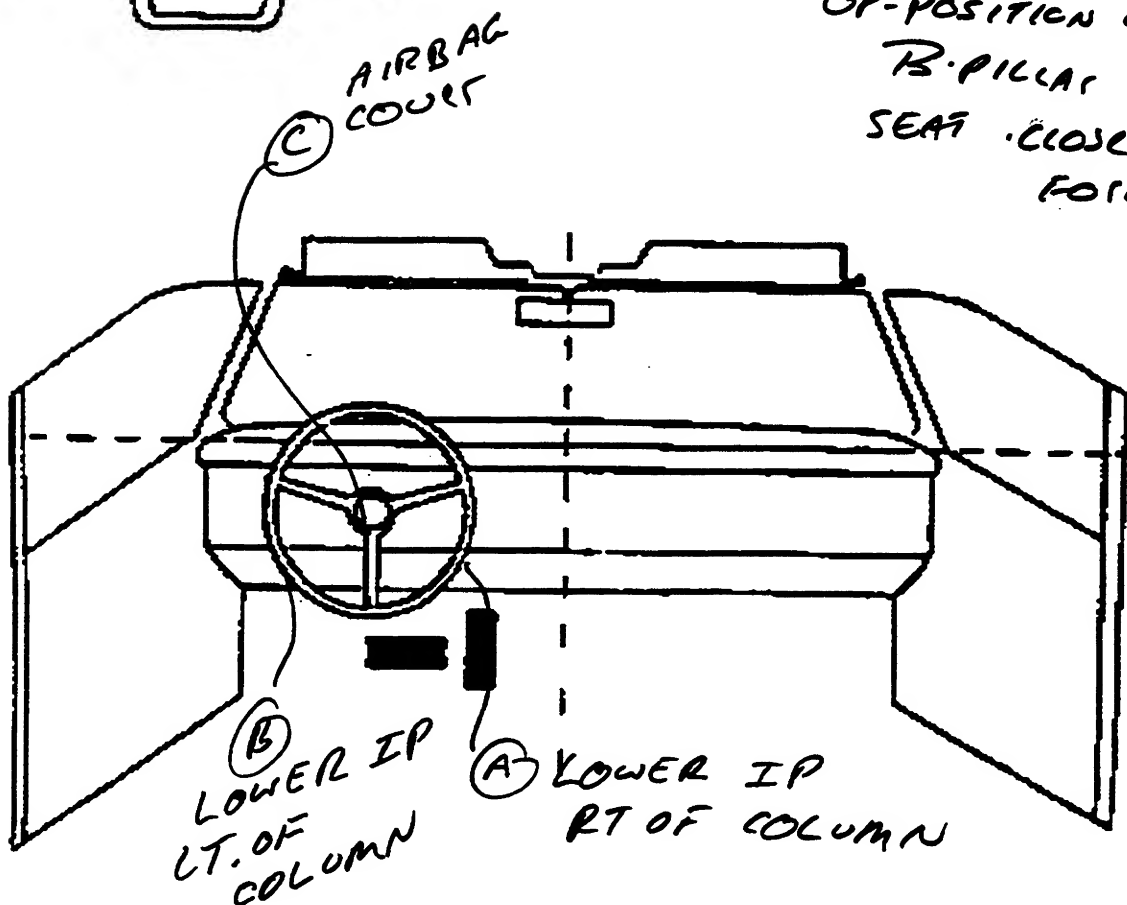
INTRUSION IT-2

VEHICLE OCCUPANT CONTACT DIAGRAM



NO MARKS ON BELT

DRIVER BELT -
UP-POSITION ON
B-PILLAR
SEAT CLOSE TO
FORWARD



AIRBAG
COURT

(B) LOWER IP
LT. OF
COLUMN

(A) LOWER IP
RT OF COLUMN

INTRUSION IT-3

CODES FOR COLUMN B, OCCUPANT SPACE NUMBER

OCCUPANT SPACE NUMBER IS A TWO-DIGIT CODE. THE USE OF THE CODE IS DETERMINED BY THE VEHICLE SEAT CONFIGURATION AT THE TIME OF THE ACCIDENT.

FIRST DIGIT

THE FIRST DIGIT (LEFT DIGIT) DENOTES THE SEAT ROW, WITH CODE VALUES FROM 1 TO 5.

SECOND DIGIT

THE SECOND DIGIT (RIGHT DIGIT) DENOTES THE POSITION ON THE SEAT AND, IN SOME INSTANCES, THE WIDTH OF THE SEAT.

- | | | | |
|--------------------------|-----------------|-------------------------|---|
| (1) LEFT | (3) RIGHT | | INDIVIDUAL SEAT |
| (1) LEFT | (2) CENTER | (3) RIGHT | BENCH: FULL WIDTH 3 PASSENGER |
| (1) LEFT | (2) LEFT CENTER | (6) RIGHT CENTER | (3) RIGHT BENCH: FULL WIDTH 4 PASSENGER |
| (1) LEFT | (2) CENTER | (5) RIGHT & AISLE SPACE | BENCH: PARTIAL WIDTH, LEFT |
| (0) LEFT & SPACE | (2) CENTER | (5) RIGHT & SPACE | BENCH: PARTIAL WIDTH, CENTERED |
| (4) ENTIRE VEHICLE WIDTH | | | CARGO AREA |

EXAMPLES

THE TWO FIGURES BELOW PROVIDE EXAMPLES OF THE OCCUPANT SPACE NUMBER.

PASSENGER CAR
5 PASSENGERS

X	X	11	13
X	X	X	21 22 23

VAN
12 PASSENGER CAPACITY

X	X	11	13	
X	X	X	21 22 25	
X	X	X	31 32 35	
X	X	X	X	41 42 46 43

CODES FOR COLUMN F, MEASUREMENT AXIS

- (X) X-AXIS (FORE & AFT)
(Y) Y-AXIS (LATERAL)
(Z) Z-AXIS (VERTICAL)

CODES FOR COLUMNS G, H, I & J, OCCUPANT & INJURY NUMBERS

OCCUPANT NUMBER	INJURY NUMBER	CONTACT
(00)	(00)	NO CONTACT
(##)	(00)	CONTACT, NO INJURY
(97)	(99)	CONTACT, OCCUPANT UNKNOWN, INJURY UNKNOWN
(99)	(00) OR (99)	UNKNOWN IF CONTACT

INTRUSION IT-4

CODES FOR COLUMN C, INTRUDING COMPONENT OR OBJECT

NOTE: DO NOT CODE OBJECTS OTHER THAN COMPONENTS OF CASE VEHICLE.

INDIVIDUAL COMPONENT

INTERNAL

- (01) INSTRUMENT PANEL
- (02) FIRE WALL
- (03) TOE PAN
- (04) FLOOR PAN
- (05) STEERING COLUMN
- (06) WINDSHIELD
- (07) WINDSHIELD HEADER
- (08) A-PILLAR
- (09) DOOR PANEL OR SIDE PANEL
- (10) WINDOW FRAME
- (11) B-PILLAR
- (12) C-PILLAR
- (13) D-PILLAR
- (14) ROOF SIDE RAILS
- (15) ROOF OR CONVERTIBLE TOP
- (16) BACKLIGHT HEADER
- (17) FRONT SEAT-BACK SURFACE/
SEAT-BACK BACK SURFACE
- (18) SECOND SEAT-BACK SURFACE
SEAT-BACK BACK SURFACE
- (19) THIRD SEAT-BACK SURFACE
SEAT-BACK BACK SURFACE
- (20) FOURTH SEAT-BACK SURFACE
SEAT-BACK BACK SURFACE
- (21) FIFTH SEAT-BACK SURFACE
SEAT-BACK BACK SURFACE
- (22) BACK PANEL/BACK DOOR SURFACE
- (23) SEAT CUSHION SURFACE/EDGE
- (24) CONSOLE
- (25) OTHER (DESCRIBE)
- (26) UNKNOWN INTERNAL SURFACES
- (28) TRANSMISSION TUNNEL (HUMP)
- (29) SIDE FOOTWELL PANEL (KICKPANEL)
- (30) SILL

EXTERNAL

- (43) HOOD
- (44) OBJECT EXTERNAL TO PASSENGER
COMPARTMENT BUT PART
OF CASE VEHICLE
- (45) OUTSIDE SURFACE OF CASE VEHICLE
- (46) OTHER (E.G. SPARE TIRE,
JACK. DESCRIBE.)
- (49) UNKNOWN EXTERNAL OBJECT

GROUPED FOR MASSIVE INTRUSION INTO AN OCCUPANT SPACE

USE ONLY IF ALL THESE COMPONENTS
INTRUDED INTO A SINGLE OCCUPANT SPACE.

- | | |
|------------------------|-------------------------|
| (50) WINDSHIELD HEADER | (60) ROOF |
| A-PILLAR | ROOF RAIL |
| ROOF SIDE RAIL | A-PILLAR |
| (51) INSTRUMENT PANEL | B-PILLAR |
| A-PILLAR | C-PILLAR |
| DOOR PANEL | WINDOW FRAME |
| (52) INSTRUMENT PANEL | DOOR PANEL |
| A-PILLAR | FLOOR PAN |
| WINDSHIELD HEADER | (61) INSTRUMENT PANEL |
| (53) DOOR PANEL | TOE PAN |
| B-PILLAR | WINDSHIELD HEADER |
| ROOF RAIL | A-PILLAR |
| (54) DOOR PANEL | ROOF RAIL |
| A-PILLAR | WINDOW FRAME |
| ROOF RAIL | DOOR PANEL |
| (55) INSTRUMENT PANEL | ROOF |
| FLOOR PAN | (62) ROOF |
| A-PILLAR | ROOF RAIL |
| DOOR FRAME | C-PILLAR |
| (56) ROOF RAIL | WINDOW FRAME |
| A-PILLAR | FLOOR PAN |
| B-PILLAR | SECOND SEAT |
| WINDOW FRAME | DOOR PANEL |
| (57) ROOF RAIL | (63) ROOF RAIL |
| A-PILLAR | ROOF |
| B-PILLAR | B-PILLAR |
| C-PILLAR | WINDOW FRAME |
| DOOR PANEL | FLOOR PAN |
| (58) ROOF | DOOR PANEL |
| ROOF RAIL | SECOND SEAT |
| WINDOW FRAME | FRONT SEAT |
| DOOR PANEL | (64) ROOF RAIL |
| (59) BACKLIGHT HEADER | ROOF OR CONVERTIBLE TOP |
| ROOF | A-PILLAR |
| C-PILLAR | B-PILLAR |
| THIRD SEAT-BACK | WINDOW FRAME |
| | WINDOW HEADER |
| | (65) WINDSHIELD |
| | WINDSHIELD HEADER |
| | ROOF SIDE RAIL |
| | (66) WINDSHIELD |
| | WINDSHIELD HEADER |
| | A-PILLAR |
| | (98) NOT APPLICABLE |
| | (99) UNKNOWN |

Duplicate columns 1-8
from the previous card.Module 1 1 Format 0 1
9 10 11 12

INTRUSION IT-5

WAS THERE OCCUPANT COMPARTMENT INTRUSION? 0
13

- (0) NO DO NOT ANSWER NEXT QUESTION. SKIP PAGE.
 (1) YES ANSWER NEXT QUESTION.
 (9) UNKNOWN SKIP PAGE.

WAS INTRUSION CATASTROPHIC?
14

- (0) NO COMPLETE PAGE.
 (1) YES SKIP PAGE.

Duplicate columns 1-8
from the previous card.Module 1 1 Format 0 2
9 10 11 12

NOTE: Each line in the table below is a separate record (card). Duplicate columns 1 - 12 for each completed line.

INTRUSIONS CODE INTRUSIONS IN THIS ORDER: LEFT TO RIGHT ON ROW; FRONT TO BACK IN VEHICLES.
 CODES FOR B, F, G, H, I, J ON PAGE IT-3
 CODES FOR C ON PAGE IT-4

OCCUPANT CONTACT AND INJURY

A	B	C	D	E	F	G	H	I	J	K
INTRUSION NUMBER	OCC. SPACE NO.	INTRUDING COMPONENT OR OBJECT	ASSOC. EVENT NO.	MAXIMUM INTRUSION X AXIS (cm)	MAXIMUM INTRUSION Y AXIS (cm)	MAXIMUM INTRUSION Z AXIS (cm)	OCCUPANT NUMBER	INJURY NUMBER	OCCUPANT NUMBER	INJURY NUMBER
13-14	15-16	17-18	19	20-21	22-23	24-25	26-27	28-29	30-31	32-33
<u>0 1</u>	— —	— —	—	— —	— —	— —	— —	— —	— —	— —
<u>0 2</u>	— —	— —	—	— —	— —	— —	— —	— —	— —	— —
<u>0 3</u>	— —	— —	—	— —	— —	— —	— —	— —	— —	— —
<u>0 4</u>	— —	— —	—	— —	— —	— —	— —	— —	— —	— —
<u>0 5</u>	— —	— —	—	— —	— —	— —	— —	— —	— —	— —
<u>0 6</u>	— —	— —	—	— —	— —	— —	— —	— —	— —	— —
<u>0 7</u>	— —	— —	—	— —	— —	— —	— —	— —	— —	— —

NOTE: USE ADDITIONAL PAGE IF MORE THAN 7 INTRUSIONS.

Duplicate columns 1-8
from the previous card.Module 1 1 Format 0 3
9 10 11 12NOTE: IF NO SIDE DOOR INTRUSION,
SKIP REMAINDER OF PAGE.SIDE DOOR INTRUSION
RESULTED FROM

INTRUSION NUMBER	CAUSE	CODES FOR CAUSE:
<u>13</u>	<u>15</u>	(1) DIRECT IMPACT
<u>16</u>	<u>18</u>	(2) INDUCED DAMAGE
<u>19</u>	<u>21</u>	(9) UNKNOWN

IF DAMAGE TO DOOR COMPONENT RESULTED IN INCREASED
DOOR INTRUSION, CODE COMPONENT

INTRUSION NUMBER	DAMAGED COMPONENT 1	DAMAGED COMPONENT 2	CODES FOR COMPONENTS
A <u>22</u> <u>23</u>	—	<u>25</u>	(0) NONE
B <u>26</u> <u>27</u>	—	<u>29</u>	(1) A-PILLAR
C <u>30</u> <u>31</u>	—	<u>33</u>	(2) B-PILLAR
D <u>34</u> <u>35</u>	—	<u>37</u>	(3) C-PILLAR
			(4) LATCH/STRIKER
			(5) HINGES
			(7) OTHER: <u> </u>
			(8) NOT APPLICABLE
			(9) UNKNOWN

Duplicate columns 1-8
from the previous card.

Module 1 1 Format 0 2
9 10 11 12

INTRUSION IT-6

NOTE: Each line in the table below is a separate record (card).
Duplicate columns 1 - 12 for each completed line.

- ADDITIONAL PAGE -

INTRUSIONS CODE INTRUSIONS IN THIS ORDER: LEFT TO RIGHT ON ROW; FRONT TO BACK IN VEHICLES.
CODES FOR B, F, G, H, I, J ON PAGE IT-3
CODES FOR C ON PAGE IT-4

OCCUPANT CONTACT AND INJURY

A	B	C	D	E	F	G	H	I	J	K
INTRUSION NUMBER	OCC. SPACE NO.	INTRUDING COMPONENT OR OBJECT	ASSOC. EVENT NO.	MAXIMUM INTRUSION X AXIS (cm)	MAXIMUM INTRUSION Y AXIS (cm)	MAXIMUM INTRUSION Z AXIS (cm)	OCCUPANT NUMBER	INJURY NUMBER	OCCUPANT NUMBER	INJURY NUMBER
13-14	15-16	17-18	19	20-21	22-23	24-25	26-27	28-29	30-31	32-33
0 8	---	---	---	---	---	---	---	---	---	---
0 9	---	---	---	---	---	---	---	---	---	---
1 0	---	---	---	---	---	---	---	---	---	---
1 1	---	---	---	---	---	---	---	---	---	---
1 2	---	---	---	---	---	---	---	---	---	---
1 3	---	---	---	---	---	---	---	---	---	---
1 4	---	---	---	---	---	---	---	---	---	---
1 5	---	---	---	---	---	---	---	---	---	---
1 6	---	---	---	---	---	---	---	---	---	---
1 7	---	---	---	---	---	---	---	---	---	---
1 8	---	---	---	---	---	---	---	---	---	---
1 9	---	---	---	---	---	---	---	---	---	---
2 0	---	---	---	---	---	---	---	---	---	---
2 1	---	---	---	---	---	---	---	---	---	---
2 2	---	---	---	---	---	---	---	---	---	---
2 3	---	---	---	---	---	---	---	---	---	---
2 4	---	---	---	---	---	---	---	---	---	---
2 5	---	---	---	---	---	---	---	---	---	---

(4) YES, and OCCUPANT CONTACT
(8) NOT APPLICABLE
(9) UNKNOWN

39

Duplicate columns 1-8
from the previous card.Module S T Format 0 2
9 10 11 12

SEATS

ST-1

FRONT SEAT	DRIVER	PASSENGR	FRONT SEAT-BACK	DRIVER	PASSENGR
TYPE OF FRONT SEAT (00) NO SEAT (01) STANDARD BENCH (02) SPLIT BACK, 50-50 (03) SPLIT BACK, DRIVER WIDE (04) SPLIT BACK, PASS. WIDE (05) BUCKET (06) CAPTAIN'S CHAIR (07) INDIV. BENCH, 50-50 (08) INDIV. BENCH, DRIVER WIDE (09) INDIV. BENCH, PASS. WIDE (97) OTHER: _____ (99) UNKNOWN	05 13 14	05 15 16	SEAT-BACK TYPE (1) FORWARD FOLDING (2) RIGID (3) RECLINING (7) OTHER: _____ (8) NOT APPLICABLE (9) UNKNOWN	3 30	3 31
TYPE OF SEAT MOUNT (1) STANDARD (2) PEDESTAL (7) OTHER: _____ (8) NOT APPLICABLE (9) UNKNOWN	1 17	1 18	SEAT-BACK LOCK TYPE (0) NONE (1) MANUAL (2) INERTIA (3) POWER (7) OTHER: _____ (8) NOT APPLICABLE (9) UNKNOWN	1 32	1 33
SWIVEL MECHANISM EQUIPPED (0) NO (1) YES (8) NOT APPLICABLE (9) UNKNOWN	0 19	0 20	LOCKS HELD (0) NO (1) YES (8) NOT APPLICABLE (9) UNKNOWN	1 34	1 35
ORIGINAL EQUIPMENT SEATS (0) NO (1) YES (8) NOT APPLICABLE (9) UNKNOWN	1 21	1 22	RECLINER MECHANISM HELD (0) NO (1) YES (8) NOT APPLICABLE (9) UNKNOWN	1 36	1 37
CONTACT OF SEAT BY REAR OCCUPANT (0) NO (1) YES (8) NOT APPLICABLE (9) UNKNOWN	8 23	8 24	HEAD RESTRAINT HEAD RESTRAINT TYPE (0) NONE (1) ADJUSTABLE (2) INTEGRAL (3) NOT INTEGRAL, BUT CANNOT BE REMOVED (7) OTHER: _____ (8) NOT APPLICABLE (9) UNKNOWN	1 38	1 39
FRONT SEAT DAMAGE (0) NONE (1) BACKREST ONLY DAMAGED (2) CUSHION ONLY DAMAGED (3) BACKREST & CUSHION DAMAGED (8) NOT APPLICABLE (9) UNKNOWN	0 25	0 26	REMOVED PRE-CRASH (0) NO (1) YES (8) NOT APPLICABLE (9) UNKNOWN	0 40	0 41
CENTER ARMREST DAMAGED (0) NO (1) YES (7) EQUIPPED, DAMAGE UNKNOWN (8) NOT APPLICABLE (NO CENTER ARMREST) (9) UNKNOWN IF EQUIPPED	8 27		ADJUSTMENT AT CRASH (1) UP (2) DOWN (8) NOT APPLICABLE (9) UNKNOWN	1 42	2 43
FRONT SEAT ROTATION (0) NONE APPARENT (1) FORWARD APPARENT (2) REARWARD APPARENT (3) LEFT APPARENT (4) RIGHT APPARENT (5) MULTIPLE ROTATIONS SPECIFY _____ (8) NOT APPLICABLE (9) UNKNOWN	0 28	0 29	HEAD RESTRAINT DAMAGE (0) NONE (1) DAMAGED BUT NOT SEPARATED (2) SEPARATED (8) NOT APPLICABLE (9) UNKNOWN	0 44	0 45

SEATS ST-2					
FRONT SEAT ADJUSTMENT SEAT ADJUSTMENT TYPE		DRIVER	PASSENGER	SECOND SEAT (CONT.) CENTER ARMREST DAMAGED	
(0) NONE (RIGID) (1) MANUAL (2) POWER (7) OTHER: (8) NOT APPLICABLE (NO SEAT) (9) UNKNOWN		<u>1</u> 46	<u>1</u> 47	(0) NO (1) YES (7) EQUIPPED, DAMAGE UNKNOWN (8) NOT APPLICABLE (NO CENTER ARMREST) (9) UNKNOWN IF EQUIPPED	
ADJUSTMENT PROVIDED		<u>1</u> 48	<u>1</u> 49		
(1) 2-WAY (2) 4-WAY (3) 6-WAY (7) OTHER: (8) NOT APPLICABLE (9) UNKNOWN					
SEAT ADJUSTER DAMAGE		<u>0</u> 50	<u>0</u> 51	SECOND SEAT-BACK LOCKS	
(0) NONE (1) CHUCKING (FREE PLAY) (2) DEFORMED (RELEASED/JAMMED) (3) SEPARATED (7) OTHER: (8) NOT APPLICABLE (9) UNKNOWN				FOR THE FOLLOWING, USE:	
				(0) NO (1) YES (8) NOT APPLICABLE (9) UNKNOWN	
SEAT ADJUSTER SEPARATION		<u>8</u> 52	<u>8</u> 53	LEFT OR CENTER, EQUIPPED	
(0) NONE (1) SEPARATED AT FLOOR (2) SEPARATION OF ADJUSTER (3) SEPARATED AT SEAT (8) NOT APPLICABLE (9) UNKNOWN				<u>1</u> 61	
PRE-CRASH POSITION		<u>1</u> 54	<u>3</u> 55	LEFT OR CENTER, HELD	
(1) FORWARD (2) MIDDLE (3) REARWARD (8) NOT APPLICABLE (9) UNKNOWN				<u>1</u> 63	
				(3) SEAT FOLDED DOWN	
				RIGHT, EQUIPPED	
				<u>8</u> 65	
				RIGHT, HELD	
				<u>8</u> 67	
				(3) SEAT FOLDED DOWN	
				<u>1</u> 66	
				<u>1</u> 68	
SECOND SEAT TYPE OF SECOND SEAT		LEFT	RIGHT	THIRD SEAT	
(0) NONE (1) NON-FOLDING (2) FOLDING (3) CAPTAIN'S CHAIR (4) JUMP SEAT (5) INTEGRAL CHILD SEAT (6) LUGGAGE AREA ACCESS PANEL (9) UNKNOWN		<u>2</u> 56	<u>2</u> 57	EQUIPPED	
				<u>0</u> 69	
				BACKREST DAMAGED	
				<u>8</u> 71	
				CUSHION DAMAGED	
				<u>8</u> 73	
				<u>0</u> 75	
SECOND SEAT DAMAGE		<u>0</u> 58	<u>0</u> 59	VEHICLE EQUIPPED WITH REAR HEAD RESTRAINTS	
(0) NONE (1) BACKREST ONLY (DAMAGED OR LOOSENED) (2) CUSHION ONLY (DAMAGED OR LOOSENED) (3) BACKREST & CUSHION (DAMAGED OR LOOSENED) (4) INTEGRAL CHILD SEAT (PRIORITY CODE) (5) LUGGAGE AREA ACCESS PANEL (DAMAGED OR LOOSENED) (8) NOT APPLICABLE (9) UNKNOWN				(0) NOT EQUIPPED (OR REMOVED) (1) EQUIPPED (2) EQUIPPED & DAMAGED (8) NOT APPLICABLE (NO REAR SEAT) (9) UNKNOWN	
				Applies to any rear-seat position	
				<u>0</u> 75	

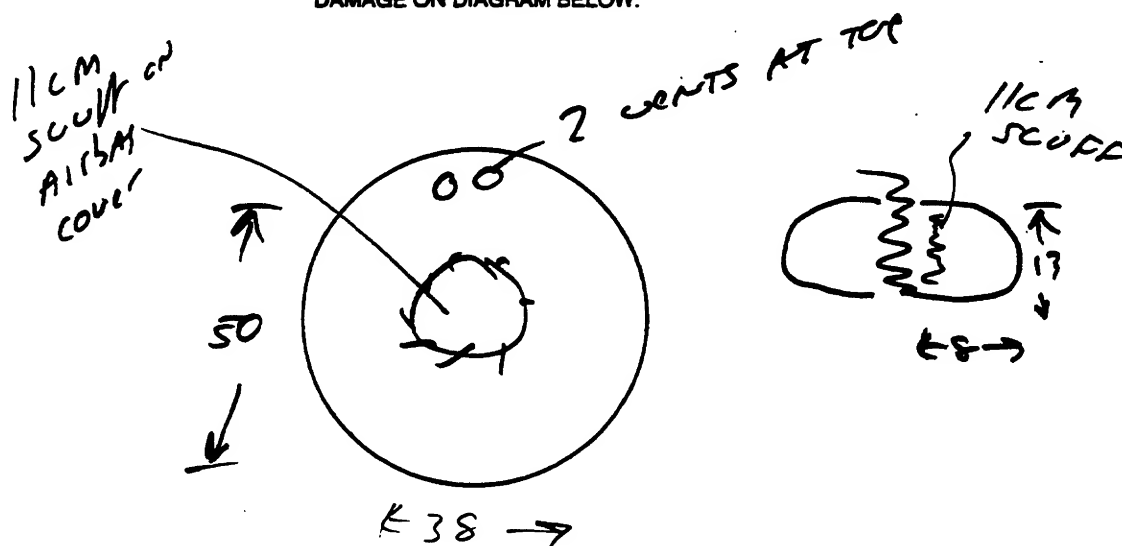
Duplicate columns 1-8
from the previous card.Module A B Format 0 1
9 10 11 12

AIRBAG AB-1

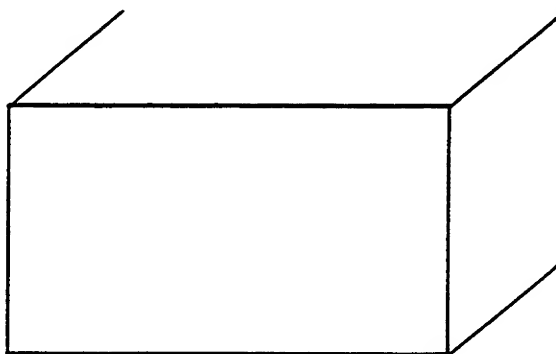
DRIVER SIDE		PASSENGER SIDE	
LOCATION OF AIRBAG STEERING WHEEL EQUIPPED (0) NO (1) YES (4) PRIOR DEPLOYMENT NOT REINSTALLED (9) UNKNOWN IF AIRBAG EQUIPPED DEPLOYED (0) NO (1) YES (2) PARTIAL/IMPROPER DEPLOYMENT (8) NOT APPLICABLE (NO AIRBAG) (9) UNKNOWN	1 <hr/> 13	LOCATION OF AIRBAG INSTRUMENT PANEL (GLOVE BOX) EQUIPPED (0) NO (1) YES (4) PRIOR DEPLOYMENT NOT REINSTALLED (9) UNKNOWN IF AIRBAG EQUIPPED DEPLOYED (0) NO (1) YES (2) PARTIAL/IMPROPER DEPLOYMENT (8) NOT APPLICABLE (NO AIRBAG) (9) UNKNOWN	1 <hr/> 16 1 <hr/> 17
CONDITION OF AIRBAG STEERING WHEEL (0) NO DAMAGE (2) SPLIT OR TORN (3) CUT DURING CRASH (4) BURNED/MELTED (5) CUT POST CRASH (6) OTHER _____ (7) DAMAGED, CONDITION UNKNOWN (8) NOT APPLICABLE (NOT EQUIPPED/NOT DEPLOYED) (9) UNKNOWN IF EQUIPPED OR CONDITION	0 <hr/> 15	CONDITION OF AIRBAG INSTRUMENT PANEL (GLOVE BOX) (0) NO DAMAGE (2) SPLIT OR TORN (3) CUT DURING CRASH (4) BURNED/MELTED (5) CUT POST CRASH (6) OTHER _____ (7) DAMAGED, CONDITION UNKNOWN (8) NOT APPLICABLE (NOT EQUIPPED/NOT DEPLOYED) (9) UNKNOWN IF EQUIPPED OR CONDITION	0 <hr/> 18
DRIVER SIDE AIRBAG STEERING WHEEL TETHER (0) NO (1) YES (6) OTHER _____ (7) UNKNOWN IF TETHERED (8) NOT APPLICABLE (NO AIRBAG) (9) UNKNOWN IF AIRBAG EQUIPPED MARKED BY CONTACT (0) NO (1) YES (8) NOT APPLICABLE (NO AIRBAG) (9) UNKNOWN	1 <hr/> 19 0 <hr/> 20	PASSENGER SIDE AIRBAG INSTRUMENT PANEL (GLOVE BOX) TETHER (0) NO (1) YES (6) OTHER _____ (7) UNKNOWN IF TETHERED (8) NOT APPLICABLE (NO AIRBAG) (9) UNKNOWN IF AIRBAG EQUIPPED MARKED BY CONTACT (0) NO (1) YES (8) NOT APPLICABLE (NO AIRBAG) (9) UNKNOWN	0 <hr/> 21 0 <hr/> 22

AIRBAG AB-2

AIRBAG NUMBER ON DRIVER SIDE:

NOTE AND DESCRIBE ANY AIRBAG CONTACT OR
DAMAGE ON DIAGRAM BELOW:

AIRBAG NUMBER ON PASSENGER SIDE:

NOTE AND DESCRIBE ANY AIRBAG CONTACT OR
DAMAGE ON DIAGRAM BELOW:

NOTE TO THE INVESTIGATOR:

THE FOLLOWING TWO SECTIONS,
OCCUPANT INFORMATION AND INJURY CLASSIFICATION,
ARE TO BE FILLED IN
FOR EACH CASE VEHICLE OCCUPANT,
WHETHER INJURED OR NOT.

IF THERE IS MORE THAN ONE OCCUPANT,
USE ADDITIONAL COPIES
OF PAGES OC-1, OC-2, OC-3,
AND IC-2 TO DESCRIBE THEM
AND ATTACH THE COPIES TO THIS REPORT.

TEAM REPORT NUMBER: 0M-3720-98

Duplicate columns 1-8 from the previous card.		Module <u>0</u> <u>C</u> Format <u>0</u> <u>2</u> 9 10 11 12	OCCUPANT INFORMATION OC-1	
OCCUPANT IDENTIFICATION OCCUPANT NUMBER <u>01</u> 13 14 ROLE OF OCCUPANT AT 1ST IMPACT (1) MOTOR VEHICLE DRIVER (2) MOTOR VEHICLE PASSENGER (NOT DRIVER) (9) UNKNOWN <u>1</u> 15		PHYSICAL DESCRIPTION AGE IN YEARS (00) LESS THAN 1 YEAR (98) 98 YEARS OR OLDER (99) UNKNOWN <u>53</u> 20 21 AGE IN MONTHS (00) LESS THAN 1 MONTH (25) 25 MONTHS OR OLDER (99) UNKNOWN <u>25</u> 22 23 MASS (kg) <u>140</u> (999) UNKNOWN <u>064</u> 24 25 26 HEIGHT (cm) <u>5'3</u> (999) UNKNOWN <u>160</u> 27 28 29 SEX (1) MALE (2) FEMALE (9) UNKNOWN <u>2</u> 30		
OCCUPANT POSITION ROW LOCATION (1) FRONT (2) SECOND (3) THIRD (4) FOURTH (7) OTHER: _____ (8) EXTERNAL TO PASSENGER COMPARTMENT (E.G. BED OF PICKUP) (9) UNKNOWN <u>1</u> 16 LATERAL LOCATION (1) LEFT (2) LEFT CENTER (3) CENTER (4) RIGHT CENTER (5) RIGHT (6) ALL (LYING ON SEAT) (8) EXTERNAL TO PASSENGER COMPARTMENT (9) UNKNOWN <u>1</u> 17 POSTURE (10) SITTING ON SEAT (11) SITTING ON SEAT IN ABNORMAL POSITION (E.G. FEET ON DASH, SIDEWAYS) (12) SITTING ON CONSOLE (20) ON LAP OR IN ARMS (30) STANDING ON SEAT (40) STANDING ON FLOOR (47) STANDING, EXTERNAL TO PASSENGER COMPARTMENT (50) IN BASSINET (60) IN CHILD SEAT (65) IN CHILD HARNESS (70) LYING ON SEAT (80) LYING/SITTING ON PASSENGER FLOOR (83) LYING/SITTING ON OTHER OBJECT IN PASSENGER COMPARTMENT: _____ (85) ON CARGO FLOOR/FOLDED SEAT-BACK (87) LYING/SITTING, EXTERNAL TO PASSENGER COMPARTMENT (97) OTHER: _____ (99) UNKNOWN <u>10</u> 18 19		MEDICAL CONDITIONS TREATMENT/MORTALITY (00) NONE (01) FIRST AID AT SCENE (02) TREATED AT HOSPITAL/CLINIC BUT NOT ADMITTED (03) HOSPITALIZED FOR OBSERVATION LESS THAN 24 HOURS (04) HOSPITALIZED OVER 24 HOURS OR FOR SIGNIFICANT TREATMENT (05) FATAL, DEAD AT SCENE (06) FATAL, DOA (07) FATAL, DEAD WITHIN 24 HOURS (08) FATAL, DEAD 24 HOURS TO 31 DAYS LATER (09) FATAL, DEAD 31 DAYS TO 1 YEAR LATER (10) FATAL DEAD WITHIN UNKNOWN PERIOD (99) UNKNOWN <u>02</u> 31 32 INJURY SEVERITY SCORE (ISS) (99) UNKNOWN <u>01</u> 33 34 NON-IMPACT MED. CONDITIONS (0) NONE (1) YES, TIME & TYPE UNKNOWN (2) PRE-CRASH FATAL (CLINICAL DEATH AT WHEEL) (3) PRE-CRASH NON-FATAL (E.G. PRIOR INJURY, STROKE) (4) PREGNANT (5) POST-CRASH FATAL (DROWNING) (6) POST-CRASH NON-FATAL INJURY (7) OTHER: _____ (8) COMBINATION OF ABOVE (CIRCLE EACH) (9) UNKNOWN <u>0</u> 35		

OCCUPANT INFORMATION OC-2

MEDICAL CONDITIONS (CONT.)

POLICE INJURY SEVERITY
CODE FOR THIS OCCUPANT

- (0) O - NO INJURY
 (1) C - POSSIBLE INJURY
 (2) B - NON-INCAPACITATING
 (3) A - INCAPACITATING INJURY
 (4) K - FATAL
 (5) INJURED, SEVERITY UNKNOWN
 (6) DIED PRIOR TO IMPACT
 (7) NON-FATAL INJURY,
 SEVERITY UNKNOWN
 (9) UNKNOWN

2
36

CHILD SEAT TYPE

- (00) NONE USED
 (01) YES, USED
 (02) INTEGRAL, Chrysler Mini-van
 (88) NOT APPLICABLE
 (ADULT OR OLDER CHILD)
 (99) UNKNOWN

88
41 42

CHILD SEAT MAKE/MODEL

RESTRAINT SYSTEM

ACTIVE RESTRAINT SYSTEM

- (0) NONE
 (1) LAP BELT
 (2) SHOULDER HARNESS ONLY
 (3) BOTH LAP BELT &
 SHOULDER HARNESS
 (9) UNKNOWN

3
37

ACTIVE RESTRAINT SYSTEM USAGE

- (0) NONE (AVAILABLE BUT NOT USED)
 (1) LAP BELT ONLY
 (2) SHOULDER HARNESS ONLY
 (3) BOTH LAP BELT &
 SHOULDER HARNESS
 (7) IMPROPER USAGE
 (8) NOT APPLICABLE (NONE AVAILABLE)
 (9) UNKNOWN

3
38

PASSIVE RESTRAINT SYSTEM

- (0) NONE
 (1) AIRBAG INSTALLED
 (2) PASSIVE UPPER TORSO
 WITH KNEE BOLSTERS
 (3) PASSIVE UPPER TORSO
 WITHOUT KNEE BOLSTERS
 (4) PASSIVE LAP & UPPER TORSO
 (5) AIRBAG INSTALLED &
 PASSIVE RESTRAINT
 (7) OTHER: _____
 (9) UNKNOWN

1
39

PASSIVE RESTRAINT SYSTEM USAGE

- (0) SYSTEM DEFEATED
 (1) AIRBAG NOT DEPLOYED
 (2) AIRBAG DEPLOYED
 (3) AIRBAG NOT REINSTALLED
 (4) PASSIVE UPPER TORSO USED
 (5) PASSIVE LAP & UPPER TORSO USED
 (6) SYSTEM USED IN MANUAL MODE
 (7) IMPROPER USAGE
 (8) NOT APPLICABLE (NOT ORIGINALLY
 EQUIPPED)
 (9) UNKNOWN

2
40

EJECTION

DEGREE OF EJECTION

- (0) NONE
 (1) PARTIAL
 (2) COMPLETE
 (7) EJECTED, DEGREE UNKNOWN
 (9) UNKNOWN IF EJECTED

0
43

AREA OF EJECTION

- (01) WINDOW, LEFT SIDE
 (02) WINDOW, RIGHT SIDE
 (03) WINDOW, REAR
 (04) DOOR, LEFT SIDE
 (05) DOOR, RIGHT SIDE
 (06) DOOR, REAR OR TAILGATE
 (07) WINDSHIELD
 (08) ROOF OR OPEN CONVERTIBLE OR
 FROM EXTERNAL AREA
 (96) EJECTED AREA UNKNOWN
 (97) OTHER AREA: _____
 (98) NOT APPLICABLE (NOT EJECTED)
 (99) UNKNOWN IF EJECTED

98
44 45

IF OCCUPANT WAS EJECTED, DESCRIBE
IN DETAIL BELOW:

HEAD RESTRAINT

HEAD RESTRAINT AVAILABLE
FOR THIS POSITION

- (0) NOT EQUIPPED OR REMOVED
 (1) EQUIPPED
 (9) UNKNOWN

1
46

OCCUPANT INFORMATION OC-3

OCCUPANT EYEWEAR

- (0) NONE
- (1) GLASSES
- (2) CONTACTS
- (3) BOTH GLASSES AND CONTACTS
- (4) OTHER _____
- (8) NOT APPLICABLE
- (9) UNKNOWN

OK

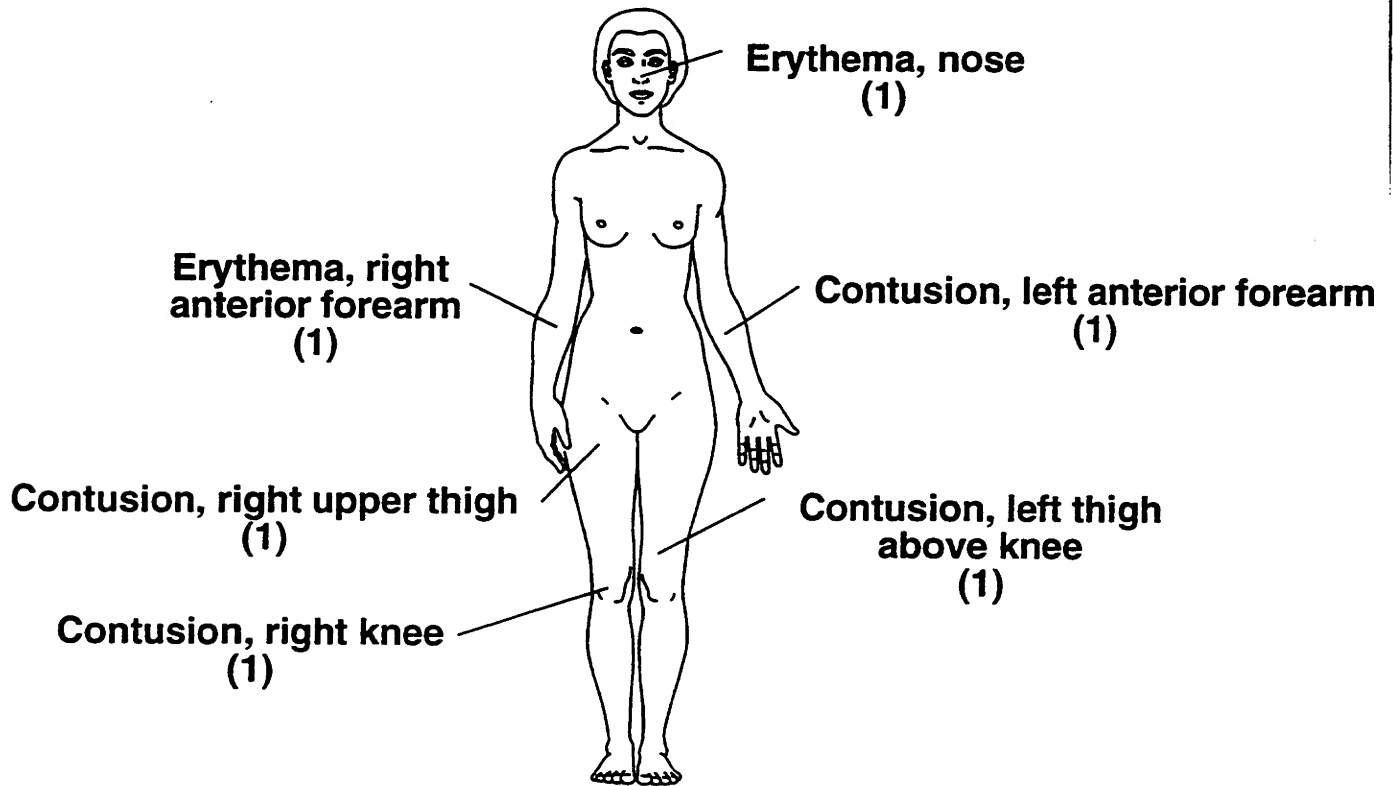
1
47

SOURCE OF INFORMATION

- (0) INTERVIEW
- (1) HOSPITAL
- (2) AUTOPSY
- (3) POLICE
- (4) OTHER _____
- (5) LAY CORONER/EXTERNAL EXAM
- (7) COMBINATION OF ABOVE (CIRCLE)
- (8) NOT APPLICABLE
- (9) UNKNOWN

0
48

INDICATE LOCATION OF INJURIES.



INJURY CLASSIFICATION IC-1

NOTE: Each line in the table below is a separate record (card). Duplicate columns 1 - 12 for each completed line.

OCCUPANT INJURY CLASSIFICATION

[illegible]

NOTE: USE ADDITIONAL PAGES IF NECESSARY.

CODES FOR AREAS OF POSSIBLE OCCUPANT CONTACT

FRONT OF PASSENGER COMPARTMENT

- (10) SUNVISOR, FITTING(S) & OR TOP MOLDING
- (12) WINDSHIELD
- (05) INSTRUMENT PANEL (SPECIFIC AREA UNKNOWN)
- (54) UPPER INSTRUMENT PANEL (X)
- (55) MIDDLE INSTRUMENT PANEL (Y)
- (56) LOWER INSTRUMENT PANEL (Z)
- (81) ASH TRAY (INSTRUMENT PANEL)
- (02) GLOVE COMPARTMENT AREA
- (47) AIRBAG (ACRS) COMPARTMENT DOOR/COVER

- (57) BENEATH INSTRUMENT PANEL
- (53) PARCEL TRAY
- (48) KNEE RESTRAINT
- (86) VERTICAL CONSOLE

- (28) FOOT CONTROLS (INCL. PARKING BRAKE PEDAL)

- (09) STEERING ASSEMBLY (SPECIFIC AREA UNKNOWN)
- (65) STEERING WHEEL
- (66) STEERING WHEEL COLUMN
- (59) TRANSMISSION LEVER ON COLUMN

- (03) HARDWARE ITEM (SPECIFIC AREA UNKNOWN)
- (82) INSTRUMENT(S)
- (83) CONTROL KNOB(S) & LEVER(S) (FRONT)
- (84) PARKING BRAKE HANDLE IN FRONT
- (67) IGNITION KEY
- (06) MIRROR
- (04) HEATER OR AIR CONDITIONING DUCTS
- (01) AIR CONDITIONING OR VENTILATION OUTLET(S)
- (08) RADIO (BUILT IN)
- (58) ADD-ON TAPE DECK, RADIO, A/C
- (68) ROOF MOUNTED CONTROLS/CONSOLES

REAR

- (88) SURFACE OF REAR INTERIOR
- (23) REAR WINDOW
- (39) REAR WINDOW HEADER
- (50) REAR SEAT CUSHION & BACK

INTERIOR-GENERAL

- (11) TRANSMISSION SELECTION LEVER (LOCATION UNK.)
- (59) TRANSMISSION LEVER ON STEERING COLUMN
- (44) TRANSMISSION LEVER ON FLOOR OR CONSOLE
- (07) PARKING BRAKE HANDLE (LOCATION UNKNOWN)
- (84) PARKING BRAKE HANDLE IN FRONT
- (85) PARKING BRAKE HANDLE ON FLOOR OR CONSOLE
- (28) FOOT CONTROLS (INCL. PARKING BRAKE PEDAL)

- (29) FRONT SEAT-BACK(S)
- (51) FRONT SEAT CUSHION
- (50) REAR SEAT CUSHION & BACK
- (49) ARMREST ON SEAT
- (89) UNDER SEAT BOTTOM

- (33) RESTRAINT SYSTEM HARDWARE
- (34) RESTRAINT SYSTEM WEBBING
- (87) AIR CUSHION SKIN (AIRBAG)
- (47) AIRBAG (ACRS) COMPARTMENT DOOR/COVER
- (46) AIRBAG GAS
- (48) KNEE RESTRAINT
- (30) HEAD RESTRAINT
- (42) CHILD SEAT RESTRAINTS
- (43) CHILD SEAT
- (31) INTERIOR LOOSE OBJECT
- (32) OTHER OCCUPANT(S)
- (52) INTERNAL FLYING GLASS (FROM ANY SOURCE)
- (41) UNKNOWN INTERIOR SURFACE

SIDES

- (20) SURFACE OF SIDE INTERIOR
- (19) HARDWARE ON SIDE OR DOOR
- (13) ARMREST ON SIDE OR DOOR
- (24) COAT HOOK

- (22) WINDOW GLASS (SIDE)
- (21) WINDOW FRAMES (SIDE)

- (26) ROOF SIDE RAIL
- (14) A-PILLAR
- (15) B-PILLAR
- (16) C-PILLAR
- (17) D-PILLAR

FLOOR

- (40) FLOOR
- (27) CONSOLE ON FLOOR OR BETWEEN SEATS
- (44) TRANSMISSION LEVER ON FLOOR OR CONSOLE
- (85) PARKING BRAKE HANDLE ON FLOOR OR CONSOLE
- (28) FOOT CONTROLS (INCL. PARKING BRAKE PEDAL)
- (91) KICKPANEL

ROOF

- (25) ROOF OR CONVERTIBLE TOP
- (10) SUNVISOR, FITTING(S) & OR TOP MOLDING
- (26) ROOF SIDE RAIL
- (24) COAT HOOK
- (18) DOME LIGHT
- (39) BACKLIGHT HEADER
- (68) ROOF MOUNTED CONTROLS/CONSOLE
- (69) ROLL BAR

EXTERIOR SURFACE OF CASE VEHICLE

- (37) OUTSIDE SURFACE OF CASE VEHICLE (SPECIFIC AREA UNKNOWN)
- (35) HOOD OF CASE VEHICLE
- (60) EXTERIOR OF CASE VEHICLE (E.G. OUTSIDE MIRRORS, ANTENNA, TRIM)
- (62) EXTERIOR SIDE ROOF RAIL OF CASE VEHICLE
- (63) TRUNK LID OF CASE VEHICLE
- (64) TIRES OF CASE VEHICLE

BEYOND CASE VEHICLE BOUNDARY

- (36) AREA EXTERIOR TO CAR (SPECIFIC AREA UNK.)
- (70) HOOD OF OTHER VEHICLE
- (71) OTHER VEHICLE EXTERIOR HARDWARE (E.G. OUTSIDE MIRRORS, ANTENNA, TRIM)
- (73) EXTERIOR SIDE ROOF RAIL OF OTHER VEHICLE
- (74) HEADLIGHT OR FRONT GRILL OF OTHER VEH.
- (75) TRUNK OF OTHER VEHICLE
- (76) OUTSIDE SURFACE OF OTHER VEHICLE
- (77) TIRES OF OTHER VEHICLE
- (78) GROUND
- (79) WATER
- (80) EXTERIOR OBJECT (NOT VEHICLE, GROUND, OR WATER. PLEASE DESCRIBE.)

PENETRATING OBJECTS

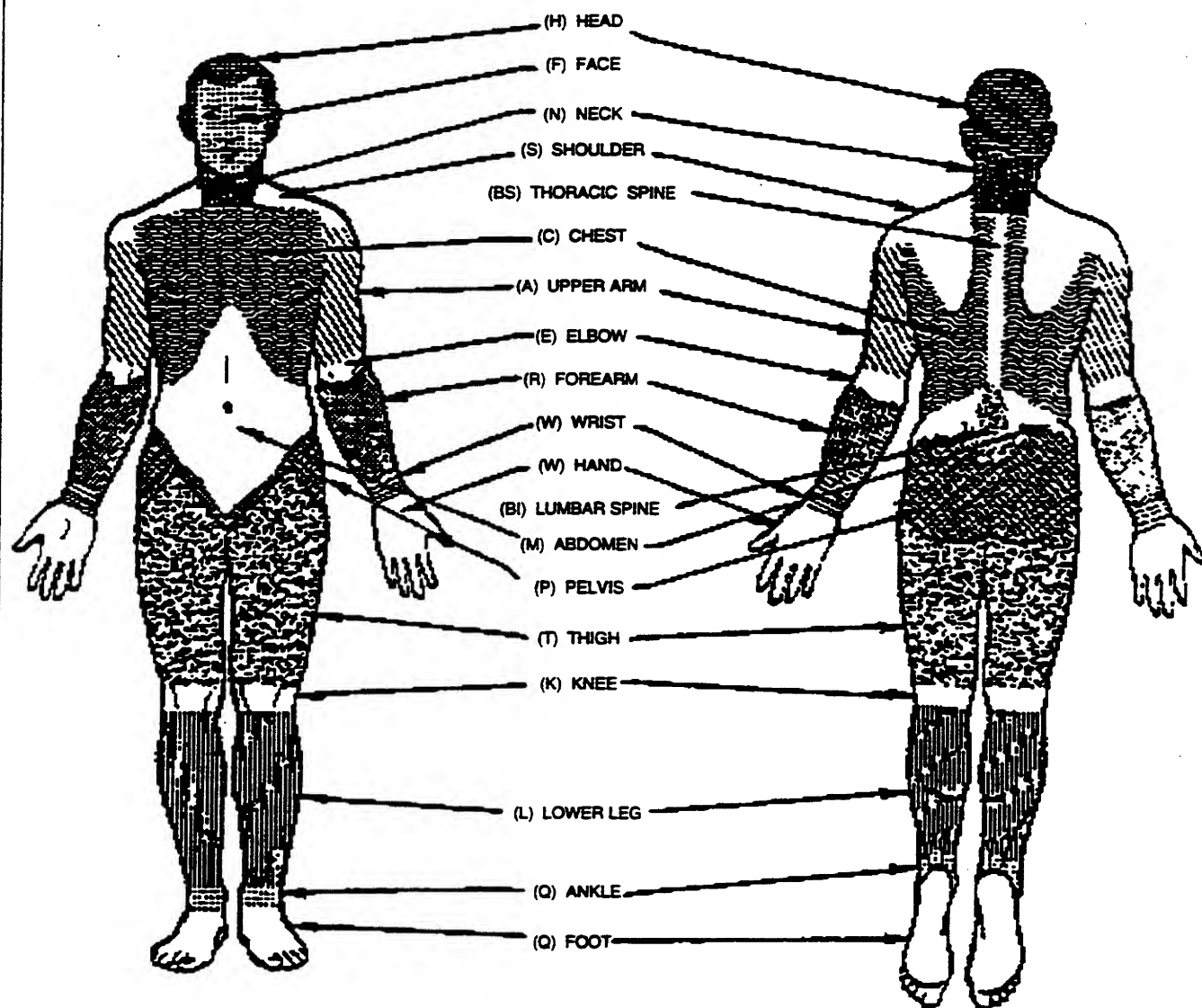
- (61) OTHER VEHICLE
- (72) OBJECTS (DESCRIBE)

MISCELLANEOUS

- (00) NO CONTACT (INVALID FIELD FORM CODE)
- (38) OTHER (E.G. FIRE. DESCRIBE)
- (90) SPARE TIRE
- (96) INDUCED
- (97) EJECTED, UNKNOWN CONTACT
- (98) IMPACT FORCE, "WHIPLASH", HYPEREXTENSION/COMPRESSION
- (99) UNKNOWN AREA OF CONTACT

INJURY CLASSIFICATION IC-3

THE FIGURE BELOW
IS AN EXPLANATION OF THE BODY REGION CODES
LISTED ON PAGE IC - 4.



INJURY CLASSIFICATION IC-4

CODES FOR OCCUPANT INJURY CLASSIFICATION (OIC)

1 BODY REGION

(H) HEAD/SKULL
 (F) FACE
 (N) NECK
 (S) SHOULDER
 (X) UPPER EXTREMITIES
 (A) ARM (*UPPER*)
 (E) ELBOW
 (R) FOREARM
 (W) WRIST/HAND
 (C) CHEST
 (M) ABDOMEN
 (B) BACK
 (P) PELVIC/HIP
 (Y) LOWER EXTREMITIES
 (T) THIGH
 (K) KNEE
 (L) LEG (*LOWER*)
 (Q) ANKLE/FOOT
 (O) WHOLE BODY
 (U) UNKNOWN

3 LESION

(L) LACERATION
 (C) CONTUSION
 (A) ABRASION
 (F) FRACTURE
 (P) PERFORATION, PUNCTURE
 (K) CONCUSSION
 (V) AVULSION
 (R) RUPTURE
 (S) SPRAIN
 (D) DISLOCATION
 (N) CRUSH
 (M) AMPUTATION
 (B) BURN
 (G) DETACHMENT, SEPARATION
 (Z) FRACTURE AND DISLOCATION
 (T) STRAIN
 (E) TOTAL SEVERANCE, TRANSECTION
 (O) OTHER
 (U) UNKNOWN

4 SYSTEM/ORGAN

(S) SKELETAL
 (V) VERTEBRAE
 (J) JOINTS
 (D) DIGESTIVE
 (L) LIVER
 (N) NERVOUS SYSTEM
 (B) BRAIN
 (C) SPINAL CORD
 (E) EARS
 (O) EYES
 (A) ARTERIES
 (H) HEART
 (Q) SPLEEN
 (G) UROGENITAL
 (K) KIDNEYS
 (R) RESPIRATORY
 (P) PULMONARY/LUNGS
 (M) MUSCLES
 (T) THYROID, OTHER ENDOCRINE GLAND
 (I) INTEGUMENTARY (*SKIN*)
 (W) ALL SYSTEMS IN REGION
 (U) UNKNOWN

2 ASPECT

(R) RIGHT
 (L) LEFT
 (B) BILATERAL
 (C) CENTRAL
 (A) ANTERIOR/FRONT
 (P) POSTERIOR/BACK
 (S) SUPERIOR/UPPER
 (I) INFERIOR/LOWER
 (W) WHOLE REGION
 (U) UNKNOWN

BODY REGION	ASPECT	LESION	SYSTEM/ORGAN	SEVERITY
1	2	3	4	5

**5 SEVERITY
(OR "AIS", ABBREVIATED INJURY SCALE)**

(0) NONE
 (1) MINOR
 (2) MODERATE
 (3) SERIOUS
 (4) SEVERE
 (5) CRITICAL
 (6) MAXIMUM
 (9) UNKNOWN



PN 3720-98 #2



PN3720-98 #3



PN 3720-98 #4



PN 3720-98 #5



PN 3720-98 #6
Best Available



PN 3720-98 #7
Best Available



PN3720-98 #8
Best Available



PN 3720-98 #9
Best Available



PN 3720-98 #10
Best Available



PN 3720-98 #11
Best Available



PN 3720-98 #12
Best Available



PN3720-98 #13
Best Available



PN3720-98 #14

Best Available



PN3720-98 #15



PN3720-98 #16
Best Available



PN3720-98 #17



PN3720-08 #18
Best Available



PN3720-98 #19
Best Available



PN 3720-98 #20



PN 3720-98 #21



PN3720-98 #22



PN 3720-96 #23



PN3720-98 #24



PN 3720-98 #25



PN 3720-98 #26



PN 3720-98 #27





PN3720-98 #29



PN3720-98 #30



PN3720-98 #31



PN3720-98 #32



PN 3720-98 #33



PN 3720-98 #34



PN3720-98 #35



PN3720-98 #36



PN 3720-98 #37



PN3720-98 #38





PN 3720-98 #40



PN3720-98 #41

UNITED STATES

DEPARTMENT OF JUSTICE

INVESTIGATIVE DIVISION

MEMORANDUM FOR THE DIRECTOR

SUBJECT: [REDACTED]

DATE: [REDACTED]

BY: [REDACTED]

